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ABSTRACT

This sixth annual national compilation of research and development activities in agricultural education contains abstracts of 181 studies completed during the period July 1, 1979, to June 30, 1980. Thirty-five of the completed studies represent staff research, 79 represent master's studies, and 67 represent doctoral dissertations and one undergraduate honors thesis. Studies are arranged alphabetically by state and alphabetically by author within states. Information provided for each study includes author(s), title, type, date, and location, as well as brief discussions of purpose, method, and findings. Studies reported as being in progress during 1980-81 are also compiled. They are arranged alphabetically by state and by author within states. There are 76 staff studies, 66 master's studies, and 50 doctoral dissertations. Author, title, type, and location are cited. A subject index on the completed studies is provided. Two appended tables show location of previous regional and national summaries of studies in agricultural education on microfiche in the ERIC system. (YLB)

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SUMMARIES OF RESEARCH
AND
DEVELOPMENT ACTIVITIES
IN
AGRICULTURAL EDUCATION
1979 - 1980

United States of America

Compiled and Edited

by

JIMMY G. CHEEK

U S DEPARTMENT OF HEALTH,
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NATIONAL INSTITUTE OF
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Department of Agricultural and Extension Education
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Gainesville

December, 1980

PREFACE

This document represents the sixth annual national Summaries of Research and Development Activities in Agricultural Education in the United States of America. Personnel from states not included in this compilation are encouraged to submit summaries for succeeding issues.

The compilation includes abstracts of 181 studies completed during the period, July 1, 1979 to June 30, 1980. Thirty-five of the completed studies represent staff research, 79 represent master's studies, 67 represent doctoral dissertations, and one undergraduate honors thesis. Studies are arranged alphabetically by state and alphabetically by author within states. A subject index is included.

Studies reported as being in progress during 1980-1981 are also compiled. They are arranged alphabetically by state and by author within states. There are 76 staff studies, 66 master's studies and 50 doctoral dissertations in progress.

The compilation of Summaries of Research and Development Activities in Agricultural Education is an activity of the Research Committee, Agricultural Education Division, American Vocational Association. Dr. Joe W. Kotrlik of Louisiana State University has been appointed to compile the 1980-81 report.

The location of previous Summaries of Studies compiled by region and nationally is shown at the back of this publication.

The editor acknowledges and expresses gratitude to all of those who assisted with this effort. Special appreciation is extended to Dr. Carl E. Beeman, Mrs. Lynne Kirkland, and my wife, Ileen.

Jimmy G. Cheek

TABLE OF CONTENTS

Page

Preface ii

Table of Contents iii

Summaries of Research and Development Activities in Agricultural Education, 1979 - 1980

Alabama. 1
Arizona. 2
Colorado 3
Connecticut. 6
Florida. 9
Georgia. 10
Idaho. 12
Illinois 15
Indiana. 22
Iowa 27
Louisiana. 33
Maryland 33
Minnesota. 36
Mississippi. 42
Missouri 43
Montana. 47
Nebraska 48
New York 49
North Dakota 54
Ohio 57
Oklahoma 89
Pennsylvania 96
Tennessee. 106
Texas. 107
Utah 108
Virginia 111
Washington 119
West Virginia. 120

Studies in Progress 122

Subject Index, Summaries of Research and Development Activities in Agricultural Education, 1979-80. 139

Location of Previous Summaries of Studies in Agricultural Education 1968-1974. 151

Location of Previous Summaries of Studies in Agricultural Education 1974-1979. 152

Previous Compilers and Editors. 153

SUMMARIES OF RESEARCH AND DEVELOPMENT ACTIVITIES IN AGRICULTURAL EDUCATION, 1979-80

ALABAMA

IVERSON, Maynard J. and DAVIS, Paul D. "The Effects of Selected Inservice Education Methods on Reducing the Apprehension Levels of Vocational Agricultural/Agribusiness Instructors Regarding Teaching Students with Physical Disabilities." Staff Study, 1980, Auburn University, Auburn.

Purpose. The primary purpose of the study was to determine effective inservice education methods to reduce the apprehension of experienced vocational education teachers regarding instruction of handicapped students. Beginning and post-workshop attitudes toward the disabled were also sought. In order to guide the study, three null hypotheses were generated and tested.

Method. A three-group, randomized, pre- and post-test experimental design was utilized. Thirty teachers of vocational agri-business in Alabama, who were attending a workshop for cooperating teachers, were randomly assigned treatments which consisted of a videotaped presentation, a lecture (control) and a self-paced individualized packet. The "Attitudes Toward Disabled Persons" (ATDP) instrument was utilized to collect data. Descriptive and inferential statistics utilized to analyze the data included: percentages, means, frequencies, correlated T-tests, Chi Square and analysis of variance.

Findings. The participants ranged in age from 24 to 56 years (mean of 35.7 years). Number in the immediate family was one to seven (mean of 3.5). The average income was $17,217.00. Just four participants had handicapped persons in their family, and only one-third had taken coursework in teaching the handicapped; but, 55.2 percent had experience in teaching the handicapped. Education was nearly equally divided among masters, bachelors, and specialist degrees. No statistically significant differences were found on demographic variables among the three groups.

All three null hypothesis were rejected at the .05 level of confidence: Vo-Ag teachers were moderately positive in attitudes toward the disabled; there were changes in attitudes after inservice treatments as measured by the ATDP; and the videotape presentation was most effective. Lecture was next in effectiveness and the self-study was least effective in changing attitudes of teachers toward the disabled. Seven recommendations were made, based on the findings of this study.

IVERSON, Maynard J. and SPENCER, Clayton. "Occupational Status and Program Related Views of the 1974 Graduates of Vocational Agricultural/Agribusiness Education in Alabama." Staff Study, 1979, Auburn University, Auburn.

Purpose. The primary purpose of the study was to determine the effects of vocational agriculture/agribusiness education in Alabama on the graduates from 1974. Current status, perceptions of value of program components and reactions to recent program modifications were also sought.

Method. The study was conducted as part of the 10-state Research Committee of the Southern Region study, "The Role of High School Vocational Agriculture/Agribusiness Education in the Occupational Success of Graduates." The proposal, instrument, sampling procedure and data processing which were developed by the Regional Committee were utilized by the Alabama researchers. A 10% systematic sample of departments netted 23 schools for the sample. Graduates were identified by a State listing and verified by current teachers; 315 graduates received the questionnaire. A 10% random follow-up of non-respondents was conducted by telephone. Total response was 31.1%.

Findings. The 108 respondents were: primarily male (97.2%), 22 or 23 years of age (82.3%), Caucasian (84.3%), from a rural/small town home (97.2%), high school educated (67%), enrolled in Vocational Agriculture and FFA three to four years (68.2%) and 72%, respectively), holder of the Chapter Farmer or higher degree (57.9%), involved in S.O.E. programs one or more years (73.2%), non-involved in adult classes, earning a median of $10,233.88 gross income annually, and employed in a non-agricultural occupation (43.1%), farming (18.3%), in college (13.8%), in off-farm agricultural occupations (12%), self employed (7.3%), or unemployed (5.4%).

Over 90% of the respondents would enroll again; they agreed that the program helped them to get along, learn to work, develop leadership and agricultural skills; they disagreed with the adequacy of the career guidance role of the program. Graduates felt that their teachers encouraged entry into agricultural careers and provided some information on other careers. Respondents placed high value on year-around employment of teachers, laboratory instruction, S.O.E.P., FFA, adult instruction and programs emphasizing farming and off-farm agribusiness occupations. The researchers made 13 recommendations and six suggestions for further study.

ARIZONA

COX, David E. "Programmatic Factors Associated With Effective Occupational Education Programs in Community Colleges." Doctor of Philosophy Dissertation, 1980, University of Arizona, Tucson.

Purpose. The purpose of this study was to identify programmatic factors common to highly effective community college occupational education programs and to develop an evaluative checklist.

Method. Programmatic factors pertinent to this study were synthesized from the literature and evaluative instruments. Thirty-five occupational education programs in Arizona, Washington, and Oregon were identified and the directors of those programs responded to each factor. Respondents were categorized by the respective instructional dean of occupational education as either an "effective program" or an "ineffective program". The Predictive Measure of Association was used to test the association of each independent variable with the category of effectiveness. Variance was calculated for each factor and a statistical "cutoff" established.

Findings. Major findings included: (1) the identification of 15 programmatic factors associated with the effective occupational education programs; (2) clustering of the factors into the characteristics of Curriculum, Program Support, Student Follow-up and Placement, Program Image, Staffing, and Program Planning; and (3) the development of a checklist, including an assessment scale, which utilizes the identified programmatic factors associated with effective occupational education programs in community colleges.

ZURBRICK, Phillip R. and COX, David E. "Occupational Component Analysis in Agricultural Mechanization." Staff Study, Research Report 279, Agricultural Experiment Station, 1980, The University of Arizona, Tucson.

Purpose. The purpose of this study was to identify the areas of instruction and competencies required of beginning employees for entry into major mechanics job titles found in the agricultural industry in Arizona.

Method. The job titles included in the study were those in which employees were presumed to need primary knowledge and/or skill in agricultural mechanics in carrying out their daily routines. Further, the list was narrowed by selecting only those in which 100 or more persons were reportedly employed in Arizona. Employers of people in the selected job titles were randomly selected to provide an appraisal of the competencies for that job title. A personal interview was conducted with each selected employer and a scaled response recorded for each competency included in the areas which employers considered important for the job title.

Findings. Major findings include: (1) The instructional program areas of "Power and Machinery", "Construction and Maintenance" and "Electric Power and Processing" contained competencies common across more than one job title. (2) Many instructional areas recognized by American Society of Agricultural Engineers (A.S.A.E.) and competencies reported important by agricultural mechanics teachers were not needed in the opinions of employers for persons preparing for employment in major job titles in agricultural mechanics in Arizona.

COLORADO

AMEN, Kenneth E. "Competencies of the Cow-Calf Operator." Master's Report, 1979, Colorado State University, Fort Collins.

Purpose. The purpose of this study was to determine the occupational competencies necessary to enter the cow-calf operator occupation and to determine the importance of each.

Method. A questionnaire was developed by incorporating all competencies for the seven breeding beef occupations identified in the National Ag Occupations Competency Study with inputs of an industry group from cow-calf operators. Questionnaires were distributed through voc-ag instructors in

Colorado, western Nebraska and southern Wyoming to cow-calf operators in their area. Mean scores were derived for each competency by utilizing ratings from thirty-five respondents on a scale where 4=Essential, 3=Important, 2=Of some importance, 1=Not important, and 0=Not applicable.

Findings. Mean scores were determined for each of 179 competencies and for combined competencies in twelve task areas. The twelve task areas ranked from a high mean of 3.39 (Management of Cow Herd) to a low mean of 2.30 (Care of Horses). One hundred six competencies had means between 3.0 and 4.0. Forty-five competencies rated means between 2.5 and 2.99 while twenty-eight competencies had means below 2.5.

CROWDER, Joe. "An Evaluation of the Pre-Service Curriculum in Agricultural Education at Colorado State University." Master's Report, 1979, Colorado State University, Fort Collins.

Purpose. The purpose of this study was to determine the effectiveness of the agricultural education curriculum at Colorado State University as indicated by recent graduates and their administrators.

Method. Data were collected by the use of two mailed questionnaires. One questionnaire provided direct curriculum evaluations by 102 graduates residing in Colorado and the other questionnaire provided evaluations of the graduates' performance by 47 administrators.

Findings. Forty percent of the respondents were teaching vocational agriculture. Twenty-seven percent of the remaining respondents had taught vocational agriculture previous to the time of the study.

Graduates rated 75.0 percent of the undergraduate courses as being "of considerable help," and 2.5 percent "of no particular help." Courses rated least helpful were those in art, humanities, and psychology. The courses most frequently listed as most valuable were student teaching, crop production, and feeds and feeding. There was little difference between graduates teaching vocational agriculture and graduates not teaching vocational agriculture in the occupational helpfulness ratings of the courses.

Administrators considered vocational agriculture teachers strong in all areas of personal traits, preparation, performance, and professionalism. The highest ranking traits were standards of morality and physical health. Originality and preparation and use of instructional materials received the lowest rankings by administrators.

GENEREUX, Douglas G. "Colorado Agriculture Graduates' Ability to Perform and Their Source of Agricultural Mechanics Skills." Ph.D. Dissertation, 1979, Colorado State University, Fort Collins.

Purpose. The purpose of this study was to establish a data base regarding vocational agriculture students' "ability to perform" and "source of ability to perform" the production agriculture mechanics competencies as identified in the National Agricultural Occupations Competency Study. A comparison was made between students' "ability to perform" and the importance of rankings by farmers on the 361 competencies and on each of the twenty-five competency groups.

Method. A mail-out questionnaire was used to collect data from eighty-three randomly selected 1976-77 graduates who were working in production agricultural occupations or who were continuing their education in occupationally related areas. Chi squared and Pearson correlation analysis were used to determine differences and relationships.

Findings. The students' "ability to perform" was consistent with the importance rankings by farmers and was not affected by variables such as source, size of program, geographical location, parents' occupation or students' occupation. The family was identified as the most important source for the majority of the 361 competencies while the vocational agriculture program was the source for specialized competencies, primarily welding and sketching and drawing.

HAGSTROM, Donald A. "Attitudes and Perceptions of Teachers and Administrators Toward On-Site State Supervisory Visits to Colorado Vocational Agriculture Programs." Master's Report, 1980, Colorado State University, Fort Collins.

Purpose. The purpose of this study was to seek the reactions of Colorado vocational agriculture teachers and their administrators toward the procedures and components of on-site visits by state supervisors.

Method. Data were collected from a mailed questionnaire. Respondents predominently had the opportunity to indicate their degree of agreement, degree of disagreement or indecision toward various statements. These data were treated and analyzed by use of a mean weighted score. Several questions required a yes/no response, or selecting from a list. These data were reported as total numbers and percentages.

Findings. Considerable positive reaction toward the practices and procedures presently used by Colorado state supervisors existed among secondary and post-secondary vocational agriculture teachers and their administrators. Over 70 percent of the respondents felt that supervisors' activities to be helpful with housekeeping, shop record cards and types of learning experiences students receive. Respondents agreed that, overall, the supervisory on-site visit was useful.

Respondents were undecided about supervisors providing useful input dealing with the collection and use of one and five-year student placement follow-up information. Indecision also existed about supervisors being understanding of local resources and needs concerning physical facilities. Respondents were undecided about supervisory visit activities with Young Farmer programs being useful, adequate or democratic.

THOMAS, Larry G. "Vocational Agriculture Teachers' Opinions Relative to Selected Animal Science Competencies." Ph.D. Dissertation, 1979, Colorado State University, Fort Collins.

Purpose. The purpose of this study was to determine if there is a significant difference of opinion between vocational agriculture teachers and those expressed in the National Agriculture Occupations Competency Study as to the importance of selected animal science competencies.

Method. Fifteen vocational agriculture teachers in each of the eleven western states were asked to respond to the 158 item survey instrument. One hundred seven teachers returned completed questionnaires. Analysis was done using the Statistical Package for the Social Sciences (SPSS) to test the five hypotheses.

Findings. Vocational agriculture teachers did not agree with the importance of the selected animal science competencies found in the National Agriculture Occupations Study. They tended to rank as "more important" those competencies which they indicated more strength in their ability to perform. Most of their competency in these areas was derived from their own experiences with the secondary source identified as their pre-service teacher preparation program. Overall they ranked their ability to perform these competencies as only slightly better than average.

Comparisons of the variables by states and/or institutions attended indicated little or no difference between groups.

The author concluded that there is a need to upgrade pre-service and in-service preparation of vocational agriculture teachers to aid them in preparing their graduates to go to work in animal science fields.

CONNECTICUT

MANNEBACH, Alfred J. and KLINE, William D. "A Descriptive Analysis of Enrollment Patterns of Communities for Fiscal Year 1978-79 That Sent Their Students to More Than One Vocational Agriculture Program." Staff Study, 1979, University of Connecticut, Storrs.

Purpose. The purpose of the study was to analyze transportation and enrollment patterns of vocational agriculture students with regard to amended state legislation which stated that reimbursement for transportation costs would be made to a school district furnishing vocational agricultural training nearest to the sending school district.

Method. Average daily membership enrollment reports for all communities were scrutinized for FY 1978-79 to develop information on the enrollment patterns of communities which send students to schools which have vocational agriculture centers. From these reports, data was collected and analyzed. Maps were developed to illustrate patterns and to measure transportation routes and the distances from communities to the regional vocational agriculture centers. In addition, the rationale for certain student enrollment patterns for communities which sent their students to more than one regional agriculture center was developed by personal contact and telephone conversation with State personnel and vocational agriculture instructors on a case-by-case basis.

Findings. A total of 11 communities and five regional school districts sent their students to more than one regional vocational agriculture center which may or may not be nearest geographically. These districts represented approximately 19 per cent of all communities which had students attending regional vocational agriculture programs. The total number of communities sending students to regional vocational agriculture center was 141 or 83 per cent of the possible 169. Maps and case studies regarding various enrollment and transportation patterns were prepared and presented. In essence, vocational agriculture center utilization centered upon best meeting the students' needs. The enrollment patterns for FY 1978-79, on a case-by-case analysis, were based on meeting the students' vocational agriculture needs by attendance at the nearest vocational agriculture center that fulfilled their educational opportunity.

MANNEBACH, Alfred J. and KLINE, William D. "An Evaluation of The Relevance of The Vocational Agriculture Program to The Changing Economy of Connecticut." Staff Study, 1980, University of Connecticut, Storrs.

Purpose. The purposes of the study were to (1) compile data regarding the need for vocational agriculture in Connecticut, (2) develop criteria to be used as guidelines in the future development of vocational agriculture in Connecticut, and (3) identify and prioritize the alternatives for the further development of vocational agriculture in Connecticut.

Method. Research questions evolved within two contexts, relevance and access. Program components identified as relevance factors were (1) community and vocational agriculture enrollments, (2) current and potential agriculture and related agricultural employment, and (3) graduate placement. Program components considered as access factors were (1) program awareness, (2) recruitment and admissions procedures, (3) transportation, (4) tuition, and (5) instructional environment. Several methods of data collection were employed. Demographic data, assessment data, and perception data were collected from 1426 or 79 per cent of the vocational agriculture student population of 1800 and 59 or 94 per cent of the 63 vocational agriculture teachers by directly administering survey instruments in the schools. Interviews with the vocational agriculture department heads were also conducted. Assessment, perception, and program logistics data were collected from 122 or 86 per cent of the 141 school superintendents through a mailed questionnaire. Current and projected employment data were collected by surveying a random sample of 355 or 10 per cent of the 3600 agricultural firm operators and 132 or 6 per cent of the 1980 Farm Bureau members in the state using a mailed questionnaire. Follow-up data were collected from state reports. A factor analysis, one-way analysis of variance, frequency distributions, means, and cross-classifications were the various statistical procedures used to analyze the data.

Findings. Assessment, perception and follow-up data collected validated the need for vocational agriculture in Connecticut. The need was further substantiated by data which showed that a gap existed between

11

the number of current vocational agriculture program graduates and projected manpower needs. More graduates are needed to meet manpower needs; approximately ten per cent of employment needs were being met for full-time employment opportunities in agricultural firms while approximately one-third of full-time opportunities were being met on farms. Twelve criteria, stated in question format, were developed to serve as appropriate guidelines for planning the direction the development of vocational agriculture in Connecticut would have in the future. Strategies identified and prioritized for the further development of vocational agriculture in Connecticut included recommendations on adult education program development, new program development, and expansion, relocation and maintenance strategies. Many other findings pertinent to the future development of the program of vocational agriculture in Connecticut were reported.

MANNEBACH, Alfred J. and KLINE, William D. "An Evaluation of Selected Vocational Agriculture Program Factors by Secondary Vocational Agriculture Students." Staff Study, 1980, University of Connecticut, Storrs.

Purpose. The objectives of the study were to (1) determine the relationship between vocational agriculture students' assessment of and perceptions on selected vocational agriculture program factors and (2) determine whether or not differences existed between vocational agriculture students' assessment of and perceptions on selected vocational agriculture program factors by sex, residence, grade level, and area of curriculum specialization.

Method. Demographic, assessment and perception data were collected from 1426 or 79 percent of the total of 1800 vocational agriculture students present on the day of the survey. Survey instruments were administered in vocational agriculture classes by project staff. The factors measured were vocational agriculture facilities, quality of vocational agriculture instruction, agricultural employment potential, vocational agriculture program awareness, and vocational agriculture program logistics. Statistical procedures used to measure the results of the survey included a factor analysis on assessment and perception items, descriptive statistics to measure objective number one and a one way analysis of variance to measure objective number two. Bartlett Box-F (SPSS package) for testing homogeneity of variance was employed and The Duncan Multiple Range Test was utilized to ascertain differences between groups. The null hypotheses were tested at the .05 level of significance.

Findings. The results of objective number one were developed by analyzing the student mean responses for each item within the factor analyzed group of responses. Significant differences were found when one-way analysis of variance was used to analyze students' assessment and perception responses by grouping them according to sex, residence, grade level and area of curriculum specialization. Four items had a critical F value that was significant when student responses were grouped by sex. When student responses were grouped by residence, farm or non-farm, four significant differences were found. Eleven significant differences were calculated when student responses were grouped by grade level. When student responses were grouped by area of specialization, five significant differences were computed. The data developed provides information which will be of educational value in the future development of the statewide program of vocational agriculture. It also provides support for the previously unmeasured contention by many individuals that the vocational agriculture program provides students with a positive educational experience.

FLORIDA

CURRY, Thomas Longino. "Teachers' Reactions to and Utilization of the Nursery Operations Materials." Master of Science Thesis, University of Florida, Gainesville, 1980.

Purpose. The central purpose of this study was to determine the reactions of selected teachers in Florida to the Nursery Operations Materials and identify how they used those materials. To achieve this purpose eight objectives were developed.

Method. Data were collected by a mailed closed-form questionnaire. Of the 140 teachers sampled, responses from 105 teachers (75 percent) were received. Analyses of data for teacher reaction and utilization responses (objectives 1, 2, 5, and 6) included frequency distributions, percent responses, and means. Spearman's rank correlation coefficients were used to analyze objective 3. For objectives 4, 7, and 8 analysis of variance and Kurskall-Wallis non-parametric one way analysis of variance was used.

Findings. The major findings of this study were:

1. Teachers' reactions to the Nursery Operations Materials for seven characteristics were determined. The Dig Manual was identified as the highest rated component of the Nursery Operations Materials.
2. Teachers utilized the Nursery Operations Materials to varying degrees in the 11 different ornamental horticulture related programs studied. Nursery Operations was determined by teachers to be the program in which the Nursery Operations Materials were used to the greatest extent.
3. Teachers indicated a substantial preference for use of the Nursery Operations Materials over the V-TECS Materials.
4. No significant differences were determined between teachers' years experience employed in the ornamental horticulture industry, years experience teaching ornamental horticulture related courses, school level at which they taught, method in which they were introduced to the materials and how they reacted to and utilized the Nursery Operations Materials.
5. There was a weak negative correlation between the number of post-high school courses completed by teachers and their reactions to the Nursery Operations Materials. Those with fewer completed courses tended to rate the materials higher.

KACZOR, Coleen Teufer. "Perceptions of Agribusiness and Natural Resources Education Students and Their Instructors Toward Discipline, and the Relationship the Instructor's Personality Type Has on Those Perceptions." Master of Science Thesis, University of Florida, Gainesville, 1980.

Purpose. The central purpose of the study was to identify and describe the perceptions of Florida Agribusiness and Natural Resources Education (ABNRE) students and their instructors in Region II, toward discipline and the relationship between instructor personality type and those perceptions. There were eight objectives developed for the study:

1. To identify the perceptions of ABNRE students and their instructors toward discipline.
2. To determine the relationship between the student and instructor perceptions of discipline.
3. To describe the personality type of the ABNRE instructor and compare it to the students' and instructors' perceptions of discipline.
4. To determine the relationship between ABNRE student demographic factors and their perceptions of discipline.
5. To determine the relationship between ABNRE instructor demographic factors and their perceptions of discipline.

Method. Two closed-form questionnaires (student and teacher) and the Myers-Briggs Type Indicator (personality test) were used to collect the data. Responses were received from 40 (78 percent) of the 51 instructors who were requested to participate. Statistical analyses of data for Objectives 1, 2, and 4 included descriptive statistics (means and percentages). Chi-square analysis was used for Objectives 5 and 6, and correlational measures (Cramer's V and Spearman Rank Order) were utilized for Objectives 3, 7, and 8.

Findings. The major findings of the study were:

1. The most prominent personality type preference of the ABNRE instructors was determined to be Introverted. One Introverted personality type alone contained 40 percent of the instructors. It is known as the ISTJ or Introverted Sensing with Thinking.
2. Discipline in the schools surveyed was concluded to be adequate by both the students and instructors.
3. There were no significant correlations determined between selected demographic factors of the students and instructors toward their perceptions of discipline.

GEORGIA

CLARKE, Dennis A. "The Perceptions of Various Groups on the Relative Importance and the Relative Frequency of Performance of Selected Pedagogical Competencies of Vocational Agriculture Teachers in Georgia." Doctoral Dissertation, 1979, The University of Georgia, Athens.

Purpose. The purpose of this study was to determine the perceptions of high school principals, vocational supervisors, and agriculture teachers on the importance of and reported frequency of performance by agriculture teachers of 11 categories of pedogogical competencies.

14

Method. Competencies by categories were identified from a previous study conducted at the University of Georgia. A 5-point Likert rating scale for each index (importance and frequency of performance) was developed and included on a survey instrument which also included demographic data questions. Participants were randomly selected from the schools in Georgia which offered a vocational agriculture program during 1978-79. A mailed survey approach with follow-up letters was utilized.

Findings. Major findings include: (1) a validated list of 11 competency categories; (2) agriculture teachers differed significantly from supervisors and principals on their perceptions of importance of the competencies; (3) the three groups did not differ significantly on their perceptions of the frequency of performance of the competencies; and (4) a positive correlation exists between importance and frequency of performance of the competencies as perceived by the respondents.

EAVES, Creed W. "In-Service Training Needs as Perceived by the Georgia Teachers of Vocational Agriculture." Applied Research Project, Master of Education, 1980, The University of Georgia, Athens.

Purpose. The purpose of this study was to determine the perceived in-service training needs of Georgia vocational agriculture teachers.

Method. A survey instrument was used to determine the perceived in-service training needs of teachers of vocational agriculture in Georgia. The instruments were distributed at the annual teachers conference and gathered basic demographic data along with responses to 31 possible in-service training activities.

Findings. Major findings include: (1) The majority of Georgia teachers have less than six years teaching experience and believed that they were not adequately prepared to teach all phases of agriculture included in the high school curriculum; (2) Areas of in-service training in which more than 30% of the teachers indicated a need were irrigation systems, income taxes and social security, futures, contracts and hedging, livestock selection and improvement, artificial insemination, meats evaluation, landscaping, advanced horticulture, general forestry, land judging, pond management, vegetable production, and no-till farming.

WEAVER, Thomas C. "Importance and Consensus of Competencies Needed by Teachers of Vocational Agriculture as Perceived by Teachers and Prospective Teachers." Doctoral Dissertation, 1979, The University of Georgia, Athens.

Purpose. The purpose of this study was to investigate the perceptions of teachers of vocational agriculture and students of agricultural education as to the most desirable period in their training program for students to acquire the various competencies and to determine the relative importance of the competencies needed by a teacher of vocational agriculture in Georgia.

Method. The data used in the study were taken from a study previously conducted at the University of Georgia (O'Kelley, 1975). The population consisted of 166 teachers of vocational agriculture and 33 students of agricultural education. The competencies identified and verified in that study were sorted into three loci of responsibility. There were 88 (22%) competencies placed in Locus A (pre-employment), 176 (45%) placed in Locus B (either pre-employment or during employment), and 132 (33%) in Locus C (during employment). The competencies were ranked in descending order according to relative importance. The relative importance was determined by the combined mean score of teachers and students.

Six hypotheses were tested using the Split-Plot Factorial Analysis of Variance Design. The seventh hypothesis was tested using the Pearson Product Moment Correlation. A correlation coefficient was computed for students' mean and standard deviation, teachers' mean and standard deviation, and combined mean and standard deviation. All hypotheses were tested at the .05 level of significance.

Findings. Major findings include: (1) The teachers rated the importance level of the competencies significantly higher than did the students; (2) The index of importance was found to be significantly higher in Locus A than in either of the other two loci. There was no significant difference in the index of importance between Locus B and Locus C; (3) There was significant interaction in perceived importance between teachers and students in competencies grouped by loci of primary responsibility. The difference was largest in Locus C and smallest in Locus A; (4) There was a significant difference between the index of consensus (standard deviation) of teachers and students across all competencies and for all three loci. The standard deviation for students was consistently higher than it was for teachers; (5) There was a significant difference in the index of consensus for combined raters for the three loci of primary responsibility. Locus B had the highest standard deviation and Locus A had the lowest standard deviation; (6) There was no significant interaction in the difference in consensus between teachers and students in competencies grouped by loci of primary responsibility; (7) There was a strong negative correlation between the index of importance (mean) and the index of consensus (standard deviation) for teachers, students, and combined responses.

IDAHO

HEIMGARTNER, Dale C. "The Importance of Including Selected Units of Instruction in the Agricultural Mechanics Phase of Vocational Agriculture by Vocational Agriculture Instructors in Idaho, Washington, Oregon, Utah and Montana." Master of Science Thesis, 1980, The University of Idaho, Moscow.

Purpose. The primary purpose of this study was to determine the importance of including specific areas of agricultural mechanics in the vocational agriculture programs of five northwestern states and to assess the knowledge that vo ag instructors possess in each agricultural mechanics area.

Method. A total of 160 respondents from 5 northwestern states were included in the sample. A mailed questionnaire was used to obtain data from vocational agriculture instructors regarding the appropriateness of including specific agricultural mechanics units in the secondary vocational agriculture programs in their state. Data was also collected providing amount of time recommended for each agricultural mechanics unit as part of approved program and the level of knowledge possessed in specific agricultural mechanics units.

Findings. All states' respondents spent more of their time in the instructional area of agricultural mechanics (39.0%) than in other instructional areas. Idaho respondents spent the greatest amount of time on agricultural mechanics (46.4%) while Utah spent the least amount of time (28.4%). Vocational agriculture instructors from all states except Idaho reported their major preparation in agricultural mechanics as coming from previous farm background and experience. Idaho agriculture instructors indicated their greatest amount of preparation came from college experiences in agricultural mechanics curriculums. The agricultural mechanics units receiving the strongest importance ratings for inclusion in a comprehensive vocational agriculture program were: arc-welding, oxy-acetylene welding, tools and hardware, construction projects, tractor maintenance, small engines and farm machinery. Those units regarded as being below-average importance and least likely to be included in the agricultural mechanics curricula were: fencing, glazing, masonry and ropework. It was observed that safety education and instruction was of utmost importance with all agricultural education mechanics units. The results of the study supported the theory that vocational agriculture instructors place major instructional emphasis in areas of greatest personal knowledge and competence.

MORTENSEN, Jay C. "A Study to Determine the Effectiveness of Training Received in the Vocational Agriculture Cooperative Education Program in Blackfoot High School from 1971 to 1977." Master of Science Thesis, 1979, The University of Idaho, Moscow.

Purpose. Specific purposes of thesis study were to: (1) determine the value of the cooperative program in securing employment after graduation; (2) determine how much time and money the cooperative training program saved the students in lieu of other high school occupational training; (3) determine the effectiveness of the instruction and supervision provided as part of the agricultural cooperative program curriculum.

Method. Data for this study were obtained by mailing a survey questionnaire to 138 vocational agriculture cooperative education students who had graduated from Blackfoot High School from 1971 to and including 1977. Of the 138 students surveyed, 99 useable questionnaires were returned which represented a 71.7 percent return rate. Frequency counts, means, standard deviations, percentages and correlation coefficients were calculated for selected data.

Findings. Results of this study concluded that most agricultural cooperative education graduates entered agricultural careers (61.6%). Respondents indicated that they received information useful in obtaining their present jobs more often from friends and relatives (46.5%) and vocational agriculture instructor (36.4%) than from other sources. Participants expressed great satisfaction with instructional areas dealing with human relations traits such as getting along with fellow workers, promptness, proper grooming techniques, attitude toward work and the ability to accept constructive criticism. Of the total graduates surveyed, 84.8 percent were satisfied with the supervision provided by the vocational agriculture teacher and 94.9 percent were satisfied with the availability of counseling during their placement experience. Almost half (43.4%) of the students reported a savings from $1,000 to $8,000 because of their participation in the agricultural cooperative education program.

OETHEL, Glenn R. "An Evaluation of the Agricultural Education Department Curriculum at the University of Idaho." Master of Science Thesis, 1979, The University of Idaho, Moscow.

Purpose. The major objective of this study was to evaluate the curriculum of the Agricultural Education Department at the University of Idaho. The secondary objectives were to determine if the agricultural education departmental objectives were met; to determine if graduation requirements for agricultural education majors were acceptable; to determine the usefulness of courses taken by vocational agriculture instructors; to determine how adequately the psychology courses prepared the instructor for coping with student problems; to determine if the fifth-year curriculum was needed and to determine courses to offer as in-service workshops.

Method. Data were collected from 81 instructors graduated from the University of Idaho between 1935 and 1976. The respondents came from 5 states in the Western United States. Fifty-three vocational agriculture instructors responded from Idaho and 19 responded from out-of-state. The questionnaire developed contained information in the following areas: (1) general information, (2) objectives, (3) university curriculum requirements, (4) course evaluation, and (5) suggestions for improvement. Results were computed using the mean rating and the standard deviation from that mean. Analysis of the variance was also run on the respondents grouped by (a) area of the State of Idaho, (b) states in the study, and (c) graduation intervals. A scheffe' post-hoc test was used to determine which category differed from the others.

Findings. A mean of 9.73 years of teaching experience was calculated for the respondents of the study. A majority of the respondents rated the agricultural education objectives as satisfactorily reached. The subject areas of natural science, social science, humanities and physical science were rated by the respondents as having too many credits, while agricultural mechanics and technical agriculture subjects areas were rated as needing more credits. The vocational agriculture instructors participating in this study rated student teaching as the most useful agricultural education course. The majority of the technical agriculture courses received a more useful rating than the general education courses. Twenty-three (36.5%) of the respondents favored adding a fifth-year to the curriculum while 40 (63.5%) recommended not adding an extra year. The farm mechanization, machine and agricultural equipment fabrication and construction were mentioned most frequently as the in-service workshops needed by the vocational agriculture instructors. Farm-management, veterinary practice, horticulture and pesticides were also indicated as workshops that were needed.

SUNDERLAND, Paul L. "Training Needs of New Leaders to Idaho's 4-H Program." Paper, Master of Science, 1980, The University of Idaho, Moscow.

Purpose. The purpose of this study was to gain a better understanding of the new volunteer leader to Idaho's 4-H program. Specific interest was in learning the leader's own views with respect to: the importance of training, various subject matter, their perception of 4-H, how they preferred to gain new information and what audio-visual aids have the most impact on them. There was also the desire to learn more about the new leader and to gain demographic data.

Method. Letters were written to the state 4-H leaders of 11 states asking them for copies of the training materials used in preparation of volunteer 4-H leaders. Idaho's information and teaching training materials used for new volunteers to the 4-H program were evaluated. With this background material, a questionnaire was designed and administered via telephone to leaders across the state. A random example of 86 leaders was selected from those leaders who had zero or one year of leadership experience as indicated on the 1979 county 4-H enrollment forms. The survey data were computed using a frequency analysis of the variables, and by cross tabulation of selected variables.

Findings. Eighty-two percent of the 82 respondents were female. That percentage parallels the current state statistics comparing the number of women to men 4-H volunteer leaders. Thirty-seven percent of the respondents indicated they became a volunteer leader because their children were in 4-H; 39 percent joined because the kids needed a leader; 24 percent joined because they wanted to help. The respondents indicated that they needed specific project material with some inclusion of duties of a leader when they first started out. They also indicated a need for broad information on the total 4-H program including objectives of 4-H, demonstrations and other activities related to 4-H. The survey indicated that 65 percent of those responding did not participate in any type of 4-H training after becoming a leader. A high percentage of leaders who have dropped out did not participate in any type of 4-H training. When asked why they dropped out of serving as a volunteer 4-H leader 27 percent said they had a time conflict, 23 percent said they dropped out because their children dropped out; 19 percent were disenchanted with the 4-H program; 19 percent had moved.

ILLINOIS

Southern Illinois University

AMBROSIA, Joseph. "Identifying and Validating Competencies Needed for Entry and Advancement in the Grain Elevator Industry in Illinois." Master of Science Thesis, 1980, Southern Illinois University, Carbondale.

Purpose. The problem was to determine what should be taught to potential workers of the grain elevator industry in Illinois.

Method. Personal interviews were conducted with a stratified and selected sample of Illinois grain elevator operators. Information obtained from the series of 16 interviews served as the basis for findings.

Findings. From a list of 120 work competencies, 23 were commonly identified as being performed by beginning workers; 58 by advanced workers and 39 by the manager or owner. A suggested approach for further development was to teach beginning competencies at the high school level and others at the community college or university level.

GRAY, Richard. "Determining Competency Based Skills in Agricultural Supplies and Services." Master of Science Thesis, 1980, Southern Illinois University, Carbondale.

Purpose. The purpose of this study was to identify the Agricultural Supply and Service skills and knowledge which could be taught as part of the vocational agricultural curriculum of Dongola Illinois High School.

Method. A personal interview survey of each agricultural supply and service business in Union County was conducted; work tasks were identified and categorized as either beginning, advanced or owner/manager skills. Tasks identified as performed most often by beginning workers were used as a basis for the high school curriculum.

Findings. Forty-three of an initial 275 work tasks were included as learning objectives for the Dongola High School vocational agricultural curriculum.

JOHNSON, Roger. "A Problem Solving Approach to Animal Nutrition Education in High School Vocational Agriculture." Master of Science Thesis, 1980, Southern Illinois University, Carbondale.

Purpose. The purpose of this study was to develop hands on in-class activities for teaching animal nutrition in the high school classroom.

Method. An experiment including baby chicken feed trials was completed. Several types of feed rations, some with obvious deficiencies were fed to six groups of 20 baby chicks. Nutrition students performed the experiment during class time.

Findings. Student interest measures of the activity were high. The experiment did produce predicted results with student experimenters. Cost and space requirements were minimal. Cognitive nutrition information transfer levels were acceptable. The method was recommended for use by teachers whose programs lack adequate SOEP opportunities.

LEGACY, James W. "Competency Based Curriculum for Agricultural Occupations Phase III." Staff Study, 1980, Southern Illinois University, Carbondale.

Purpose. Phase III identified high school level teaching activities for meat processing and grain elevator occupations. Also, the conduct of in-service education for horticulture teachers was planned.

Method. Personal interviews of 16 grain elevators and 20 meat processors were used to identify beginning competencies which could be taught at the high school level. A series of 15 in-service workshops statewide were held at Collinsville, Beardstown, Champaign, Naperville, and Thornwood. Forty-four high school and community college horticulture teachers completed a course entitled development of locally directed competency based curriculum.

Findings. 1. Competency based curriculum can be effectively developed by local teachers.

2. The basis for developing high school meat processing and grain elevator occupations teaching materials was completed.

RENEAU, Fred W.; STITT, Thomas R.; and LEGACY, James W. "EPA - Agricultural Curriculum for Vocational Agricultural Dissemination - Phase IA." Staff Study, 1980, Southern Illinois University, Carbondale.

Purpose. The purposes of this study were to develop a livestock waste management media (slide/tape) and a pesticide use booklet for use in vocational agriculture programs in Illinois.

Method. The livestock waste media was reduced to 80 slides and the tape reduced to approximately 17.5 minutes. Consultants from the livestock industry and vocational agriculture teachers were involved in the media development. The 'Pesticide Use and Water Quality Booklet' was developed with the assistance of commercial pesticide, extension, vocational agriculture, and agriculture regulatory personnel in Illinois.

Findings. A 'Livestock Waste Management' slide/tape media composed of 80 2x2 slides was developed and is available to all Illinois vocational agriculture teachers. A 'Pesticide Use and Water Quality Booklet' was developed and is available to Illinois vocational agriculture programs from the Illinois Institute of Natural Resources.

STITT, Thomas R.; LEGACY, James W.; RENEAU, Fred W.; and BENTON, Ralph A. "Project for Quality Agricultural Occupations Secondary Programs Phase III." Staff Study, 1980, Southern Illinois University, Carbondale.

Purpose. The purpose of this study was to promote the use of adopted standards in the review process at the local, district, and state level; encourage departmental reviews by means of strategically located workshops within the state; develop a sample model of supportive materials and aids to make the standards more useful to local review teams; develop a slide set and tape for use with preservice and in-service programs; and determine the program resources needed by Illinois teachers for implementing the standards and improving the local programs.

Method. Preparation and distribution of review materials through sectional chairpersons; determine feasibility of holding workshops by means of a questionnaire distributed at the 1979 IAVAT Conference; responses indicated nine workshops around the state would be needed--by request a tenth was held; for those who wanted to do so, two hours of graduate credit were arranged to be earned at either Southern Illinois University or at the University of Illinois; Drs. Thomas R. Stitt and Ralph A. Benton at Southern Illinois University, and Dr. Paul E. Hemp at the University of Illinois served as instructors; and to determine the program resources needed by Illinois agricultural occupations instructors, a questionnaire was prepared and sent to a sampling of 110 teachers.

Findings. A set of 2x2 slides and a tape were made recording the procedures to be followed in preparing for and conducting a review of an agricultural program. This audio visual aid is to be used in teacher education classes and by agricultural teachers planning on doing a local review. The use of the standards is optional. They were designed to enable agricultural instructors to evaluate their programs and give direction in those areas that might need improvement. The identification of the instructors' needs for improvement in their instructional program and other related areas will enable the universities to make plans for meeting these needs through in-service workshops and classes.

University of Illinois

GLESNE, Corrine E. "These Women Too: Changes over Time in the Attitudes of Illinois Women towards Participation in Farming". Master of Arts Thesis, 1980, University of Illinois, Urbana-Champaign.

Purpose. The major goals of this research were to (1) explore past and present farming roles of Midwestern rural women, and the attitudes of women towards these roles, (2) explain these variations and changes in farming roles and attitudes, and (3) consider the implications of the study for educational programs and further research on rural women.

Method. The study combined an analysis of archival materials for a description of women's past farming roles and attitudes; in-depth interviews with eighteen Illinois farm women for a description of present farming roles and attitudes; and a review of community studies, farm journals, and rural sociology studies for an understanding of the published perspective on American rural women.

Findings. Although factors such as the woman's ownership of land, mode of farm tenure, age, off-farm work, and education level may affect the woman's farming roles and attitudes; rural women have had a long, but generally ignored history of being a vital part of farming activities. Basic roles have remained much the same, but a perceptible change in attitudes towards the woman's role appears to be taking place. Increasingly women view themselves as partners with their husbands, rather than helpmates. These findings suggest that agricultural educators should be aware of women's participation in farming and should design educational programs to help women develop appropriate farming and managerial skills.

HEMP, Paul E. "Dissemination and Use of Materials to Facilitate Locally Directed Evaluations of Agricultural Occupations Programs in Community Colleges in Illinois." Staff Study, 1980, University of Illinois, Urbana-Champaign.

Purpose. The purpose of this study was to develop standards and a procedure for utilizing these standards in locally directed evaluations of agricultural occupations programs in community colleges.

Method. The project began with a validation of the National Standards for Postsecondary Programs in Agriculture involving 109 agriculture instructors in 22 Illinois community colleges. In addition, demographic and other base data on the agriculture programs and agriculture teaching personnel were collected. A State Review Committee consisting of 40 agriculture instructors was asked to review the results of the validation process and to recommend additional revisions in the proposed standards. A list of revised and new standards was submitted to the 109 instructors for further evaluation before the final list of approved standards was developed. A procedure for using the standards in a local program review was developed and field tested at four community colleges. The procedure was then revised and rewritten for statewide distribution.

Findings. The results of this three-year research and development project were a set of 167 standards for agriculture programs in community colleges, a recommended procedure to be utilized in a local program review, a set of supportive materials for a local review team to use in conducting evaluations, and a mechanism for keeping the program standards up to date.

HEMP, Paul E. and SWANSON, Burton E. "Development and Validation of Teacher Education Standards for Agriculture." Staff Study, 1980, University of Illinois, Urbana-Champaign.

Purpose. This study was designed to validate the National Standards for Teacher Education in Agriculture for Illinois conditions. In doing so the following objectives were pursued: (1) To involve cooperating teachers, state consultants, professional teacher groups and teacher educators in the development and validation of a set of standards suitable for Illinois teacher education programs in agriculture, (2) To validate and prioritize a set of criteria to be used in evaluating teacher education programs in agriculture, (3) To develop a set of procedures for a university to follow in analyzing and evaluating teacher education programs in agriculture, and (4) To promote the articulation of teacher education programs in agriculture at four state universities in Illinois.

Method. Survey research methods were involved in this two phase research project which spanned 18 months. The project began with a validation of the National Standards for Teacher Education in Agriculture, involving cooperating teachers from four Illinois universities and the Illinois Joint Staff. The second phase of the study directly involved cooperating teachers, the state staff and teacher educators in a process of reworking and refining a new set of 22 Program Standards and 126 Evaluation Criteria. These new standards and criteria were then validated and incorporated into a program evaluation instrument which can be used for either external program evaluation or internal program review.

Findings. The result of this 18 month research effort is a 90 page evaluation instrument that organized the 22 Program Standards and 126 Criteria into five parts: (1) Recruitment, Advisement and Placement of Teachers, (2) Preparation of Teachers, (3) Graduate Programs in Agricultural Education, (4) The Agricultural Education Faculty and Cooperating Teachers, and (5) Administrative Organization, Programs and Facilities.

In utilizing the instrument for program evaluation, a three step format or procedure is followed, with each standard being taken one at a time. First, a brief amount of descriptive information is requested that is directly relevant to the standard in question. Second, the program is evaluated on the basis of the specific criteria that relate to each standard. Finally, these evaluation scores are weighted on whether the criterium was considered "essential" or "important" when the criteria were validated. The third step is to outline specific short and long range plans under each standard that need to be implemented to improve the overall program.

PEUSE, Harlan Gene. "A Case Study on the Impact of the Nigerian Manpower Project on the Agricultural Mechanics Program at an Illinois Community College." Doctor of Philosophy Dissertation, 1980, University of Illinois, Urbana-Champaign.

Purpose. In 1978-79 thirty-nine Nigerian students, who were sponsored by their government as part of the Nigerian Manpower Project (NMP) and which was coordinated by the U. S. Agency for International Development (USAID), enrolled in the two year agricultural mechanics program of a rural community college in Illinois. The purpose of the study was to examine the impact of this project on the agricultural mechanics program of the community college, with special reference to (a) past and on-going events related to the NMP (b) the concerns of American faculty, students and Supervised Occupational Experience (SOE) employers and (c) the impact on the college in terms of curriculum design, school facilities and local project coordination.

Method. The case study method was utilized, which involved nine months of intensive observation and interviewing at the college. Special data recording, validation, and analytical techniques were developed and utilized.

Findings. Data showed that the Nigerian students lacked sufficient familiarity with agriculture mechanics upon arrival at the college. Thus faculty adjusted the curriculum by designing basic introductory courses and implementing

SOE training as the final phase of the program. Still, the SOE portion of the program proved to be a troublesome component because (a) the sudden downturn of the 1979-80 regional economy reduced agriculture implement sales and restricted SOE employment opportunities and (b) the trainees often lacked affective compentencies (e.g., punctuality, efficiency, carefulness) requisite for satisfactory employment.

The presence of many Nigerian students redistributed the power balance in the agriculture mechanics program. Nigerian student behavior could overshadow American student behavior in a classroom or shop area. Inducing compliance with American norms among the trainees required continual surveillance and a system of rewards and punishments too elaborate and cumbersome for faculty to enforce. In the end, instructors had to learn patience and relax some of the expectations applied to American students.

Faculty also encountered difficulties instructing the Nigerian students as they generally lacked the problem solving orientation characteristic of most American students in the program. Language problems contributed to much of the difficulties at school and at SOE employment sites. Differences in cultural meanings and variations in intonation of English words frequently prompted Americans and Nigerians to seek clarification of statements. At other times, misunderstandings were not clarified, leading to inaccurate imputation of intentions and misinterpretation of behaviors.

The study concludes that international training at U.S. community colleges requires thorough cross-cultural orientation of members of the host institution/community and project trainees. Whatever academic good that may result from an international training project may be marked by conflict for want of sufficient cross-cultural preparation of both American hosts and foreign trainees.

SANDS, Carolyn; SWANSON, Burton E. and HERBST, John H. "Employment Trends in Illinois Agriculture." Staff Study, 1980, University of Illinois, Urbana-Champaign.

Purpose. This study reviews agricultural employment in Illinois and attempts to identify current labor needs. The examination of employment trends in Illinois agriculture is carried out within the framework of the seven taxonomic areas outlined by the U.S. Department of Education. These taxonomic areas are: Agricultural Production, Agricultural Supply & Services, Agricultural Mechanics, Agricultural Products, Ornamental Horticulture, Renewable Natural Resources, and Forestry.

Method. The identification of employment trends was made by reviewing secondary data and materials. Data published by the U.S. Bureau of the Census, the Illinois Bureau of Employment Security, the U.S. Department of Agriculture, and the Illinois Cooperative Crop Reporting Service were used extensively. Personnel in state and federal agencies, agricultural specialists, and agricultural associations were also interviewed. Once the information was gathered, general employment trends were estimated.

Findings. The employment outlook in Illinois agriculture is generally good, especially in the areas of Agricultural Supply and Services, Agricultural Mechanics and Ornamental Horticulture. Urban agricultural occupations show considerable promise, but employment opportunities are not uniform throughout Illinois agriculture. For example, there is considerable competition for positions in Renewable Natural Resources. Although many job openings can be found in the Agricultural Products area, there has been a general decline in the number of workers employed in this area over the last five years. An individual seeking a career in agriculture would be well advised to examine each career area carefully before preparing for any specialized field.

SMITH, Cynthia J. "Extension Education for Women Small Farmers in the Eastern Caribbean." Master of Extension Education, 1980, University of Illinois, Urbana-Champaign.

Purpose. The purpose of this study was to examine and then recommend extension methods which appear appropriate for the women small farmers of the Eastern Caribbean, taking into consideration the rural infrastructure, agriculture, communication and organizational linkages of rural communities.

Method. The study was based on an analysis of secondary data regarding women farmers in the Eastern Caribbean and characteristics of their rural communities. An analysis was made of appropriate and available small-farm technology in the region and the four basic extension models were reviewed. Sources included literature pertaining to the Eastern Caribbean, extension and communications for developing countries; interviews with University of Illinois faculty and graduate students who are knowledgeable in the research area; and reports from the Caribbean Agricultural Research and Development Institute and the University of the West Indies.

Findings. The research findings recommend that 1) an agricultural extension strategy for the Eastern Caribbean be developed within the framework of the integrated agricultural development approach; 2) wherever possible, extension methods should be incorporated into traditional channels of communication and focus primarily on group methods; and 3) the change agent must assume a varied and generalized role, serving as a catalyst, solution giver, process helper, and resource linker.

INDIANA

CAMP, William G. "Performance Based Curriculum Development For Disadvantaged and Handicapped Students." Staff Study, 1980, Purdue University, West Lafayette.

Purpose. The purpose of this project was to develop a model for the construction of curriculum material using VTECS occupational information as the primary background source. The materials were developed as separate self contained packages, each relating to one specific task listed in the appropriate VTECS catalog. The packages were designed along a tri-modal approach: i.e., teacher-centered, student-centered, or a combination of the two. The student-centered component was designed for use by disadvantaged and handicapped students with reading ability of roughly fourth to fifth grade levels. The teacher-centered component was to be directly implementable into the classroom without requiring extensive additional research or curriculum development.

Method. The packages were developed for field testing in two occupational areas: horticulture and auto mechanics. The VTECS catalogs selected for use in the project were Gardening and Groundskeeping and Auto Mechanics. Project staff members selected from those two documents twenty individual tasks for development into curriculum packages.

The model for each package was developed and validated as a group project by all participating staff members with the first package (module) being produced and field tested in an operating program for handicapped (EMR) students in a horticulture program. The format of the module was adjusted according to the results of that initial field trial and that module and one module for auto mechanics were then developed using the revised format and subsequently field tested. The module format finally was accepted and included the following: (1) The Cover Sheet includes Job Title, Duty, Task, and Activities. (2) Prerequisite skills and knowledge, (3) Vocabulary words, (4) curriculum guide including, unit of instruction, student objectives, suggested learning activities, evaluation, and tools, equipment and supplies required, (5) activity sheets, and (6) overhead masters. Ten teachers were utilized for field testing the first ten modules. As a result of the field test, minor revisions were made in most of the tested modules.

Findings. The tri-modal approach is an improvement over either teacher-centered or student-centered (i.e., conventional or individualized) material in that it allows the teacher the flexibility to teach the material conventionally. Among the ten field-test teachers, at least one preferred each of the three modes of potential use. All the teachers agreed that such material was needed for their D & H students. Nine of the ten teachers felt the material could fit into their programs. All ten felt that the tri-modal module approach was superior to textbooks or workbooks for their own use. All of the auto mechanics teachers involved felt that the materials might not be appropriate for use on an individual basis by D & H students. The modules for the horticulture program were all well received and generally considered quite useful in all three modes for the target population. The auto mechanics modules were well received for use in the teacher-centered mode or in the combination mode for D & H students.

CAMP, William G. "A Survey of Student Discipline Behaviors In Indiana High Schools." Staff Study, 1979, Purdue University, West Lafayette.

Purpose. The purpose of this study was to determine what specific student behaviors are perceived by vocational teachers, non-vocational teachers, and administrators to be problems in student discipline. The study also sought to determine how frequently identified problems occur and how serious teachers and administrators perceive the problems to be. Finally, the study sought to determine how much the discipline problems interfere with the learning environment.

Method. The list of student misbehaviors which formed the basis for the instrument was collected during the literature search. The initial list was a compilation of all those statements by the reviewed authors which delineated student behaviors, mannerisms, or characteristics viewed as causing concern or expressly cited as dicsiplinary in nature. The list was submitted to a panel of experts consisting of eight scholars and administrators from both the university and secondary school levels. The result of the foregoing process was a validated list of 101 student misbehaviors. The list of student misbehaviors was then incorporated into an instrument. Section one of the instrument consists of a letter to the respondent explaining the purpose of the study and a request of biographical data. Section two includes a set of instructions followed by the validated list of student misbehaviors with spaces provided for the required responses.

A stratified random sample of all secondary level teachers and administrators in Indiana was selected. A total of 1086 copies of the anonymous-but-coded instrument along with stamped, self-addressed envelopes were mailed. A total of 310 usable surveys were returned.

Findings. Of the 101 student misbehaviors, only 47 were perceived to be discipline problems by a majority of vocational teachers responding to the survey. A majority of non-vocational teachers perceived 48 of the total list of behaviors to be disciplinary problems as opposed to problems in some other area. Responding administrators considered 46 of the behaviors to be discipline problems. Vocational and non-vocational teachers reported the most frequently occurring student misbehavior was talking without permission. Administrators placed infraction of school rules/policies, tardiness to school, and abusing privileges at the top of their list. The behavior rated highest in terms of degree of interference with an orderly teaching/learning environment, as rated by vocational and non-vocational teachers was striking the teacher. Administrators rated threatening teacher highest, then angry outbursts, responding disrespectfully to teacher, and threat of physical violence.

HAMILTON, William H. "Developing a Cadre of Teachers Trained in PBVE Development." Staff Study, 1980, Purdue University, West Lafayette.

Purpose. Indiana has committed to developing job relevant Vocational Education Curriculum materials through developing job title, task lists, task analysis, learning content, content limits and DRT's. In order to acquaint vocational agriculture teachers with the process. A one week workshop with follow-up was provided for key teachers from each district of the state.

Method. Key teachers from each of the 12 FFA districts of the state were invited to participate in a one week workshop on Performance Based Vocational Education. Follow up visits were scheduled to help teachers in attendance put a self developed unit into their teaching plans.

Findings. Eleven teachers attended the workshop and developed a P.B.V.E. unit for inclusion in their 1980-81 curriculum.

HAMILTON, William H. "Developing Learning Content, Data Sheets and Domain Referenced Tests for the Agricultural Chemicals Catalog." Staff Study, 1980, Purdue University, West Lafayette.

Purpose. The purpose of this study was to translate the performance objectives, performance guides and checklists into instructional materials.

Method. The Agricultural Chemicals Catalog of tasks, performance objectives, performance guides and checklists developed in 1978-79 provided the tasks for analysis of learning content both cognitive and psychomotor needed by the two job-titles covered. Learning Content was identified for each task and tasks with common learning content were grouped into domains.

Findings. Data sheets summarizing content were developed to set content limits and provide the basis for domain referenced tests which will be made available for teacher use.

HAMILTON, William H. "Development of a Slide Tape Series to Explain Indiana V'TECS Procedures." Staff Study, 1980, Purdue University, West Lafayette.

Purpose. The purpose of this study was to provide an audio visual aid to explain the V'TECS procedure and how Indiana translates these catalogs into instructional materials.

Method. Scripts were written for each of the three phases of the V'TECS process. After scripts were finalized, slides were taken to fit the printed scripts. Tapes were made when the slide sets were completed. The three slide sets were field tested with teachers before finalization.

Findings. Three slide tape presentations were completed as follows:

Set 1. "Tomorrows Education Today!" Thirty-one slides, printed script and cassette tape.
Set 2. "Building the Data Base." Thirty-one slides, printed script and cassette tape.
Set 3. "Developing Indiana Curriculum in Vocational Education." Seventy slides, printed script and cassette tape.

HAMILTON, William H. "Inventory of Tasks in 18 Job Titles of the Agricultural Mechanics Matrix." Staff Study, 1980, Purdue University, West Lafayette.

Purpose. The purpose of this study was to provide a comprehensive list of the agricultural mechanics tasks performed by 18 job title holders in the Agricultural Mechanics Matrix.

Method. A computer based information search of literature in seven data bases was conducted using a number of descriptors. A list of task statements was generated to compile a research document.

Six Vo Ag Teachers were trained and they interviewed at least 6 job incumbents to inventory tasks performed.

Findings. Four hundred eighty-five task statements were generated and 18 job-title holders reported tasks they performed. The major finding was that very few tasks are performed by only one or two job-titles; typically many tasks are performed by many job-title holders.

MOORE, Gary E. "The Teaching Effectiveness of Female and Male Vocational Agriculture Teachers as Perceived by High School Principals." Staff Study, 1980, Purdue University, West Lafayette.

Purpose. The purpose of this study was to ascertain the teaching effectiveness of female and male vocational agriculture teachers.

Method. A teacher evaluation instrument was developed by the researcher and included items that have been identified by research as being characteristic of effective teachers. The instrument included 20 items covering teaching skills, knowledge of content and program operation. A 1-99 rating scale was used for each of the items with one being low and 99 being high. The alpha reliability of the instrument was .95.

The instrument was reviewed by agricultural teacher educators and then field tested of the small national sample of principles of vocational agriculture teachers. The final instrument was printed on colored paper and mailed out so the respondent would receive the instrument early in the week. A stamped return envelope was included with the instrument and two follow-up letters were sent. This resulted in a response rate of 96%. The 150 principals surveyed were randomly selected from throughout the United States by examining the agriculture teachers directory and randomly selecting schools that had either male or female vo-ag teachers. Seventy-five of the principals had a female vo-ag teacher while 75 of the principals had a male vo-ag teacher.

Findings. There were no statistically significant differences on the item teaching skills (which consisted of 9 different variables) between the teachers according to sex or subject taught. The mean teaching skill score for females was 73.3 while the mean teaching skill score for males was 67.6. On the item, knowledge of content, there was a statistically significant difference between teachers according to the subject they taught but not according to the sex of the teacher. The production teachers both male and female scored considerably higher than the other teachers on knowledge of the subject (knowledge of the subject consisted of six variables). On the item, program operation (program operation consisted of 4 variables) there was a statistically significant difference between teachers according to the subject taught but not according to the sex of the teacher. Horticulture teachers, in general, were less active in FFA, adult education, SOE programs, and participation in professional activities. It can be concluded from the data that there is no difference in the teaching effectiveness of female and male vocational agriculture teachers as perceived by their principals.

IOWA

CHEATHAM, Willie J. "Importance of Supervised Occupational Experience in Vocational Guidance as Perceived by Alabama Vocational Agriculture Teachers." Ph.D. Dissertation, 1980, Iowa State University, Ames.

Purpose. The purpose of this study was to determine the importance of SOE in vocational guidance as perceived by Alabama vocational agriculture teachers.

Method. The population for the study was the 440 agribusiness teachers in Alabama. A random sample of 88 teachers were drawn from the population. The questionnaire consisted of 60 vocational guidance activities with a 1-99 importance rating scale. Teachers were instructed to indicate how important SOE was in helping students with vocational guidance activities.

Findings. Teachers perceived SOE to be of utmost importance in providing 58 of the 60 vocational guidance activities studied. It was concluded that Alabama agribusiness education teachers perceive SOE to be important in vocational guidance. Even when teacher responses were analyzed according to grades taught and other teacher and situational variables, only a few significant differences were observed. This means that the agriculture teacher, parents, and employers who work closely with student SOE programs play important roles in the vocational guidance process.

CONNOLLY, Cynthia Louise. "Effectiveness of an Agricultural Instructional Model of Basic Vegetable Production at Ahfad University College for Women in Omdurman Sudan." Ph.D. Dissertation, 1980, Iowa State University, Ames.

Purpose. The purpose of the study was to investigate the effectiveness of an agricultural instructional model of basic vegetable production presented to the second and fourth year classes at Ahfad University College in Omdurman.

Method. The design of this study involved a one-group pretest-posttest design. The sample consisted of the second and fourth year students enrolled in the home science curriculum (N=32). An instructional model of basic vegetable production was developed and a survey taken before and after the treatment to assess attitude and knowledge of agriculture prior to and following the instruction.

Findings. Characteristics of Sudanese students at the university were identified. Students were interested in learning agriculture because they saw its benefits and relevance. The treatment was effective as measured by the posttests. Classes scored significantly higher on the agriculture knowledge and attitude posttests than on the pretests. Class had little or no affect on achievement in an agricultural course of the type in this study; the second year students achieved similarly to the fourth year students. Through a course of instruction in agriculture, women's knowledge and skills increase and a more favorable and positive attitude is formed toward agriculture.

EVERETT, Lawrence Barry. "The Development and Testing of a Safety Evaluation Technique for Programs of Vocational Agriculture." M.S. Thesis, 1980, Iowa State University, Ames.

Purpose. The primary purpose of the study was to develop and test a facility evaluation technique for programs of vocational agriculture.

Method. A facility evaluation and planning instrument was developed containing 117 safety items. A panel of eleven teacher educators rated the importance of each item to validate the items. The researcher visited 25 Iowa vocational agriculture departments. Using the facility safety evaluation instrument, the vocational agriculture instructor and the researcher independently rated the facility items based on the observed conditions using the established scale: 0 = non-compliance, 1 = questionable, and 2 = compliance.

Findings. The ten items that received the lowest safety priority index were: 1) jointer properly guarded, 2) arc welding helmuts equipped with proper lens, 3) friction lighter available, 4) eye protection required to be worn, 5) electrical receptacles properly covered, 6) paint booth has explosion proof wiring, 7) stationary power tools and equipment grounded, 8) leather gloves required for hot metal and rough work, 9) portable gas welding equipment turned off when not in use, and 10) paint spray booth has proper lighting. The ten items that received the highest safety rating indexes were: 1) grinders, polishers, and buffers equipped with an adequate exhaust system, 2) stationary power and non-powered tools color coded, 3) G.F.C.I. available for outdoor use, 4) face shields provided at each stationary power tool, 5) informational safety rules posted near each stationary power tool, 6) soap suds cup available to test for gas leaks, 7) stationary power tools equipped with magnetic starters, 8) stationary power tools anchored to the floor, 9) bump hats available for use, and 10) keyed master disconnect switch for stationary power tools.

JONES, John Wilbur, Jr. "Effectiveness of an Instructional Packet on Supervised Occupational Experience Programs as Evaluated by Agricultural Knowledge Achievement of Iowa Vocational Agriculture Students." Ph.D. Dissertation, 1980, Iowa State University, Ames.

Purpose. The purpose of this study was to evaluate the impact of an instructional packet on supervised occupational experience programs in terms of student agricultural knowledge achievement after two and one-half years.

Method. The study was a posttest only control group design. Students in 16 schools that had been randomly assigned to the experimental treatment group provided data for comparison with data from students in the 16 schools that were similarly assigned to the control treatment group. The "experimental treatment" consisted of access to an instructional packet developed to help beginning students select and plan individual SOE programs. An Involvement in Agriculture Inventory and the Animal Science, Plant and Soil Science, and Mechanics subtests of the Agribusiness

Achievement Test were used to collect data. Previously acquired data concerning student SOE knowledge, attitude, and planning were used in the analysis of data.

Findings. Students in the experimental treatment group had significantly higher achievement in plant and soil science than those in the control group. No significant difference was observed in achievement scores between the experimental and control groups in the areas of animal science and agricultural mechanics. The achievement scores in animal science and mechanics of Iowa juniors in vocational agriculture were significantly higher than their plant and soil science achievement score. Teacher stability (change of teacher from time of initial student enrollment in vocational agriculture) was not related to the agricultural knowledge achievement of juniors in Iowa vocational agriculture programs. Knowledge of SOE possessed by freshman in vocational agriculture in Iowa was found to be a reliable predicator of students' high school achievement in animal science, plant and soil science, and mechanics.

OGBAZI, John Nwabueze. "Factors that Affect the Choice of Major by Agricultural Education Undergraduates at Iowa State University. M.S. Thesis, 1980, Iowa State University, Ames.

Purpose. The primary purpose of this study was to identify the factors that influence the choice of major by undergraduates of the Department of Agricultural Education at Iowa State University.

Method. The population of the study covered all undergraduates pursuing a B.S. degree in the Department of Agricultural Education at Iowa State University during the spring quarter of 1980. Questionnaires were sent to 150 subjects from which 124 (83%) usable questionnaires were returned.

Findings. It was observed that: 1) 80 percent of the respondents had lived on a farm while attending high school, 2) the respondents averaged more than three years of experience in the FFA, four years of experience in 4-H, and six semesters of vocational agriculture, 3) parents, the vocational agriculture teacher, or Iowa State student or graduate had the most influence on the respondent to choose agricultural education as a major, 4) teaching would provide the respondent with the opportunity to work and mold the lives of the young, and 5) teaching would provide the respondent with the opportunity to be a leader in the community.

Working conditions that attracted the students to the teaching profession were: 1) the opportunity to interact with a wide range of individuals, 2) job satisfaction, 3) the opportunity to be creative and innovative, 4) the opportunity for continuous professional growth, and 5) maximum involvement and participation in setting goals and objectives.

OPARAUGO, Sylvester Manuawu Chukwu. "Factors Associated with the Continued Establishment of Farm Operators in Iowa." Ph.D. Dissertation, 1980, Iowa State University, Ames.

Purpose. The purpose of this investigation was to determine the factors that influenced the continued establishment of young farm operators who were studied by Crawford in 1968.

Method. Two-hundred and nineteen (76.2%) of the 307 young farm operators studied by Crawford in 1968 were interviewed by the researcher and other trained interviewers. Data collected reflected on social, economic, and educational factors that influenced continued establishment of the respondents in farming.

Findings. Money or financing was considered by a large majority of the respondents as the greatest single obstacle to their establishment in farming. High price of land and high initial and operating costs of farm equipment had major influence in the farming operations of the respondents. About 60 percent of the respondents considered themselves as being well-established in farming.

The respondents were not active in educational programs, especially young or adult farmer classes and Iowa State University short courses. Most of the respondents operated as individual operators and engaged in both crops and livestock production. There was an increase in the number of acres owned and operated and in the net income of the respondents.

SMITH, Keith Lloyd. "Educational Factors Affecting the Continued Establishment of Young Farm Operators in Iowa." Ph.D. Dissertation, 1980, Iowa State University Ames.

Purpose. The purpose of this investigation was to determine what educational factors influenced changes in the farming programs of young farm operators and how these factors contributed to the continued establishment of the young farm operators who were studied by Crawford in 1968.

Method. Two-hundred and nineteen were interviewed by the researcher and other trained researchers. Data collected revealed information on the educational attainment levels of the respondents and social and economic information about the respondent and his family.

Findings. It was observed that the respondents seldom participated in Iowa State University short courses, adult programs conducted by vocational agriculture teachers, and extension meetings and clinics. Commercial company meetings were well attended by the respondents. Farm magazines were observed to be the most valued source of technical information for farming. Crop and livestock production were the areas of instruction of most importance to the respondents and those areas in most need of instruction. Area short courses were the teaching approach favored most by the respondents followed by closed-circuit television agriculture programs.

TEH, Saidin bin. "Professional Competencies Needed by Malaysian Agricultural Extension Supervisors." Ph.D. Dissertation, 1980, Iowa State University, Ames.

Purpose. The primary purpose of this study was to identify and analyze the professional education competencies perceived to be important to the performance of Malaysian agricultural extension supervisors.

Method. Data for this study was provided by 200 agricultural extension administrators and agricultural extension supervisors of five main agricultural development agencies in West Malaysia. A questionnaire was used to obtain the respondents' perception of the importance of 87 competencies to the extension supervisors' performance and for the programs inclusion.

Findings. When the respondents were grouped by their employing agencies, they perceived 68 of the 87 competencies to be of similar importance to the performance of agricultural extension supervisors; 19 competencies had means where significant differences were observed among groups. The respondents from the five agencies perceived the competencies associated with the eight categories to be of similar importance for inclusion in the preservice and/or inservice education programs that prepares people for agricultural extension supervisor positions, except for 14 competencies where means differed significantly among agencies.

TORRES, Fabio Rodriguez. "Factors Related to the Development of County Agricultural Extension Programs in Iowa." Ph.D. Dissertation, 1980, Iowa State University, Ames.

Purpose. The purpose of this work was to analyze the experiences of selected Iowa county extension directors about some of the factors involved in the effectiveness of county agricultural extension programs through the phases of planning, implementation, and evaluation.

Method. Using the Critical Incident Technique, five central Iowa county extension directors were interviewed and their responses recorded on 30 factors by the researcher. Using a Q-sort, 14 more factors were identified and included with the 30 original items as a questionnaire. Using this instrument, a case study was made of five central Iowa county extension directors.

Findings. Inservice training courses for the county extension directors were considered necessary to administration and subject matter areas. Orientation of county extension council members in their functions was a common practice of the counties studied. Involvement of local commodity groups in the different phases of the program development process was very important for the success of the programs. Participation of state and area subject matter specialists in planning, implementing and evaluating programs contributed effectively to the achievement of the objectives. Characteristics of county extension council members that were perceived as important were: open-mindedness, interest in extension programs, and interest in the community.

TOWNSEND, Gregory Alan. "Leadership Participation Related to Socioeconomic Status of Selected Iowa Farmers." M.S. Thesis, 1980, Iowa State University, Ames.

Purpose. The purpose of this study was to analyze factors which were related to leadership participation of young Iowa farmers.

Method. Two-hundred and nineteen young Iowa farmers who had been studied by Crawford in 1968 were interviewed. The interview schedule sought information on the extent to which the respondents had participated and exerted leadership in local, state and national organizations and social, educational, and economic information about their present farming situations.

Findings. Respondents and their spouses had a relatively low level of participation in all organizations to which they belonged and did not belong to many community, state, and national organizations. Approximately 60 percent had not participated in any farm organizations.

Level of educational attainment had little effect on the level of participation of the respondents in various leadership roles. Those respondents who were members of farm organizations belonged, in the main, to county livestock associations, cooperatives and the Farm Bureau.

TREDE, Larry D. "Economic Assessment and Analysis of Agricultural Education Programs in the North Central Region." Ph.D. Dissertation, 1980, Iowa State University, Ames.

Purpose. The purpose of this study was to assess, using economic criteria, the agricultural education programs in the land-grant universities of the north central region.

Method. Departments of agricultural education included in this study were those at land-grant colleges in the states of North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Wisconsin, Illinois, Michigan, Indiana, and Ohio. The survey method was used to collect data for this project. Twelve questionnaires were mailed and responses received from eight departments.

Findings. Programs organized as departments were more closely affiliated with the college of agriculture, whereas, programs organized as a section within a department were affiliated with the college of education. For the 1978-79 academic year, a total of 275 students graduated from the undergraduate program. Of this total, 164 (59.6%) selected teaching as their first occupation. The undergraduate program required the largest amount of faculty/staff time followed by the research program and the graduate teaching/advising program. Over two-thirds of the staff salaries were used to support the undergraduate program. Salary costs per full-time equivalent (FTE) were significantly different for graduate and research functions. Time use by departments was not greatly different by size of department. Larger departments tended to have a higher cost per semester credit offered because they tended to offer a more diversified program offering both M.S. and Ph.D. degrees.

LOUISIANA

SMITH, Charles W. "Selected Characteristics of Secondary Vocational Horticulture Programs in the United States." Staff Study, 1979, Louisiana State University, Baton Rouge.

Purpose. The purpose of this study was to determine selected characteristics of secondary vocational horticulture programs in the United States. Descriptions included personal and professional characteristics of teachers, organizational structure of departments, sources of funding, nature and scope of facilities, types of supervised occupational experience programs in practice, and curriculum characteristics.

Method. Vocational horticulture programs in the United States were identified through a survey of each state supervisor of vocational agriculture/agribusiness. A total of 1,311 schools offering secondary vocational horticulture courses were identified, from which a sample of 296 (23 percent) was drawn. A stratified random sample was used to insure proportional representation of each of the four FFA regions.

Findings. The respondents indicated that 59 or 28.9 percent of the teachers had completed 25 or more college hours in horticulture and that 129 teachers had earned 7 to 24 hours. Eighty-five or 41.7 percent of the teachers reported having one year or less of horticulture work experience prior to teaching. When asked how many years vocational horticulture had been offered, 150 or 73.5 percent of the departments indicated that the program had been offered 11 years or less and 71 or 44.8 percent had offered horticulture for five years or less. Horticulture was most likely to be found in a regular high school department, 127 or 62.3 percent; or in an area vocational center, 52 or 25.5 percent.

All schools did not have greenhouses as might be expected; however, 167 or 81.9 percent did have greenhouses. Other major facilities available for instructional purposes were: land labs, 83 or 40.6 percent; lathhouses, 64 or 31.4 percent; headhouses, 53 or 26.0 percent; cold frames, 52 or 25.2 percent; and shops, 77 or 37.7 percent.

These data are national figures. Further analysis by region will be presented at a later time.

MARYLAND

MASSIE, Cecil M. "Agriculturally-Related Accidents in Maryland in 1974 and Their Relationship to Selected Variables." Doctor of Philosophy Thesis, 1979, University of Maryland, College Park, Maryland.

Purpose. The purpose of this study was to determine the relationship between selected variables and agriculturally-related accidents in the State of Maryland during 1974.

Methods. Information was obtained by using the revised form of the National Safety Council "Form for Reporting Farm Accident Data." The data in this study were obtained through the cooperation of the Department of Agricultural Engineering, Cooperative Extension Service, Maryland Farm Bureau Women's Committee, Maryland Agricultural Safety and Health Federation and the National Safety Council.

The population of this study included all farms in the 23 counties of Maryland. A 10 percent sample from this population was selected. Farms were included in the sample only if the heads of households agreed to cooperate. Location of the farms in a county was determined by a stratified sampling of areas within the county.

Chi square statistic was used to determine the relationship between certain variables.

A two-sample t-test was used to determine if there was a difference between selected demographic factors of farms that had accidents in the years 1974 and farms that did not have accidents.

A regression analysis was run to see if there was a single variable or combination of variables that could be used to predict severity of accidents on farms in the state of Maryland.

Findings. The relationship between Number of Family Members at Home and the Age of Those Injured yielded a chi square probability of .000.

The relationship between Years Attended School and Age of Injured Involved in Accidents on Farms in Maryland yielded a chi square significant at .004.

The relationship between Years on the Farm and Age of Injured yielded a chi square probability of .000.

The relationship between Hours Per Week Devoted to Farm Work and Age of Injured yielded a chi square of .001.

The following factors were found to be different when a comparison was made between accident farms and non-accident farms.

Variable	Level of Significance
Average Hours Per Week Devoted to Farm Work	.001
Number of Male Family Members Who Live/Work on Farm	.001
Number of 8 Hour Days Spent at Farm Work by Males of the Family	.001
Number of 8 Hours Day Spent at Farm Work by Hired Males	.001

The variables, Number of Persons Involved, Time Victim was with Thing Involved, and Years Attended School were identified as predictors for Severity of Injury from Accidents. It is difficult to make a prediction from these variables.

MAXWELL, Kevin M. "A Study to Determine the Relationships Between Certain Selected Factors in Vocational Education in Agriculture Programs and FFA Membership Trends." Master of Science Thesis, 1979, The University of Maryland, College Park.

Purpose. This study was conducted in the state of Maryland as the pilot for a national study. The purpose of the study was to develop survey instruments for use in the national study and to determine the extent of relationships existing in Maryland between the decline in FFA membership and the following factors: the shortage of vo-ag teachers resulting in vo-ag department closings, the number of chartered FFA chapters in existing vo-ag programs, the temporary certification of teachers, the increase in membership dues, and the reduction of length of teacher contracts.

Method. A stratified random sample of secondary schools with vo-ag programs was drawn. The sample was stratified three ways. First, three programs were in vocational-technical centers and six were in high schools. Second, three of the high schools had enrollments in the agriculture program of eighty students or more and three had less than eighty. Third, six of the programs had FFA chapters while three did not.

Data were obtained by mailed questionnaires from the respondents and from the National FFA Center in Alexandria, Virginia and the Maryland State Department of Education in Baltimore, Maryland by document search.

Findings. As a result of this study, the following null hypotheses seem justifiable for testing nationally: (1) there is no relationship between the decline in FFA membership and the shortage of vo-ag teachers resulting in a vo-ag department closing; (2) there is no relationship between the decline in FFA membership and the number of chartered FFA chapters in existing vo-ag programs; (3) there is no relationship between declining FFA membership and the temporary certification of teachers; (4) there is no relationship between declining FFA membership and the increase in FFA dues; and (5) there is no relationship between the decline in FFA membership and the reduction of length of teacher contracts. Instruments were validated to use in a national study to test the above null hypotheses.

SEIBEL, Ronald J. and PFISTER, Jill A. "The Feasibility of the Institute of Applied Agriculture Offering Two-Year College-Level Technical Agriculture Programs on the Eastern Shore of Maryland," Staff Study, 1980, The University of Maryland, College Park.

Purpose. The purpose of this study was to determine the feasibility of the Institute of Applied Agriculture offering programs and/or courses at a site in the lower eastern shore area of Maryland.

Method. Three data collection instruments were developed for this study to secure responses from a selected four county eastern shore area. A high school study survey form was distributed to 2,954 eleventh and twelfth grade students; a general agricultural community survey form which was completed by 416 local agricultural groups and community residents; and an agricultural industry representative interview form used in 36 personal interviews. These collection instruments consisted of major agricultural interest areas compatible with those used in the National Agricultural Occupations Competency Study.

Findings. Major findings include: (1) 25% of the high school students surveyed expressed an interest in an agricultural career. (2) 77.9% of the high school students expressing an interest in agricultural careers indicated an interest in attending a 2-year college-level agriculture institution on the eastern shore if a program in their agricultural interest area was offered. (3) Non-high school prospective students showed the greatest interest in production agriculture while high school students preferred the area of agricultural mechanics. (4) Industry need and support for such a program exists. (5) Non-high school prospective students would prefer to attend as part-time students in evening classes, and (6) Approximately 58% of the potential students surveyed indicated they would attend such an institution at the University of Maryland Eastern Shore campus.

MINNESOTA

ABUAN, Lualhati S. "Some Extension Education Concepts and Principles: Their Extent of Application to the Philippine Setting." Master of Education Integrating Paper, 1980, University of Minnesota, St. Paul.

Purpose. The purpose of this study was to analyze the relevance and application of United States extension education practices and concepts in the Philippine setting.

Method. Information was obtained and analyzed from the literature, the United States and Philippine Extension Services, and extension educators.

Findings. The organizational structure of the Philippine Extension Service is not a direct parallel of the United States Extension Service. The Philippine mission is more rural in emphasis and appears to be approached as working for people, often in a persuasive and convincing manner, versus working with people. Specific limitations in the applicability of United States extension education practices and concepts are illustrated.

AZAR, Mahmoud. "An Analysis of Combine Grain Harvesting Competencies Taught in Minnesota Agricultural Education Programs." Masters Study, 1980, University of Minnesota, St. Paul.

Purpose. The purpose of this study was to determine the competencies needed by agricultural workers in operating grain harvesting combines. The following areas were investigated: 1) competencies being taught, 2) the educational level at which they should be taught, 3) the most effective setting for teaching these competencies, 4) the reasons for not teaching some of the competencies, and 5) the influence of educational and work experience background of teachers on the competencies taught.

Method. Three groups of people were involved in the study: vocational agriculture teachers at the high school, adult and post-secondary (vocational-technical and university) levels, farmers and farm implement dealers.

A separate questionnaire was developed and mailed to members of each group. Each contained 50 similar combine grain harvesting competencies.

Findings. Major findings were: four competencies were recommended to be taught by all three groups, 32 of the competencies were being taught, teachers and farmers recommended high school level as the best educational level for all competencies while implement dealers recommended vocational technical institutes and high school levels, shop and classroom was recommended as the best setting for teaching competencies, lack of time was the most frequently mentioned reason for not teaching competencies, and educational background or work experience seemed to have no relationship to the number of competencies taught.

CARLSON, Leon L. "An Assessment of Adult Farm Management Teachers Opinions Regarding the On-Farm Computer Decision Aid Programs Used in Southwest and West Central Minnesota." Master of Education Integrating Paper, 1979, University of Minnesota, St. Paul.

Purpose. The purpose of this study was to evaluate the Computer Decision Aids Project in Southwest and West Central Minnesota by assessing the farm management instructor's opinions regarding the ease of use, satisfaction of input and output, frequency of use and overall effectiveness of 16 computer decision aid programs.

Method. A questionnaire was developed by the investigator and sent to 17 adult farm management instructors who were participants in the On-Farm Computer Decision Aids Project.

Findings. Major findings include: 1) the value of in-service training provided for the instructors; 2) the number of farms served by each instructor; 3) an assessment of each of the 16 Computer Decision Aid Programs used regarding time required, ease of use, understanding input and output, educational value, usefulness, and acceptability to the farmer and the months that the program was used; and 4) the value of classroom instruction in the use of Computer Decision Aids.

HANSON, Douglas L. "A Plant Growth Room for a Vo-Ag Classroom." Master of Education Integrating Paper, 1980, University of Minnesota, St. Paul.

Purpose. The purpose of this study was to investigate the use of artificial lighting in a plant growth room and to evaluate the growth room as a greenhouse alternative.

Method. Lighting information was obtained from the literature, light manufacturers, engineers, and horticulture equipment suppliers. Recommendations were prepared for lighting, room design and facilities and submitted to the building contractors. The author utilized the facility for a year.

Findings. Major findings included: 1) good plant growth was obtained with artificial lighting; 2) high-pressure lights were the most efficient light source found; 3) electricity for lighting was cheaper than heating a greenhouse in Minnesota; 4) light systems are available which give a uniform controllable light intensity and duration throughout the year.

KIM, Sung Soo. "A Study of the Relationship of FFA Advisor Cognitive Knowledge and FFA Chapter Activeness." Ph.D. Dissertation, 1980, University of Minnesota, St. Paul.

Purpose. The purpose of this study was to determine the relationship between advisor's cognitive knowledge and chapter activeness. Specific objectives of the study were to: 1) develop an appropriate test instrument to measure cognitive knowledge of FFA information; 2) determine the relationship between chapter activeness and advisor's cognitive knowledge of FFA; and 3) determine if there is a significant difference between active and inactive chapters in terms of advisor's cognitive knowledge and other characteristics.

Method. The study involved two major phases. Phase I included developing 216 multiple-choice items in eight areas of FFA knowledge. These were divided into two test instruments with 108 items in each: FFA Information Test, Form A and Form B. These tests were reviewed by a panel of judges. A random sample of 281 FFA members, state officers and college students in selected states participated in taking the Form A and B of the FFA Information Test, and the TESTAN program was employed in analyzing the test.

Phase II was focussed on the relationship between cognitive knowledge of the FFA chapter advisor and chapter activeness. A FFA Chapter Activities Inventory was developed and used with the FFA Information Test Form A to study this relationship. Data were collected from 70 of the 140 randomly sampled FFA advisors in selected states by mail. The SPSS program was used in analyzing the data.

Findings. Both forms of the FFA Information Test were judged to have very good to excellent content validity. The reliability and discrimination coefficients were over .92.

Thirty-three variables on chapter activeness were examined. The following were significantly correlated with: 1) advisor's rating of chapter activeness and 2) Advisor's Information Test scores: vo-ag enrollment who are FFA members, chapter sponsored cooperatve purchasing and selling, chapter community service activities, executive committee meetings held, total dollar amount of the chapter budget, number of chapter meetings, chapter sponsored scholarship activities, percentage of members with official jackets, chapter public relations programs presented, printed articles published, individual or chapter exhibits outside of the school, members attending state and national conventions, members participating in judging contests, National FFA Foundation medals presented, applicants for the State and American Farmer degree and proficiency award application to the District level.

KOSEL, Brian J. "An Overview of Needs Assessment, Planning, Constructing and Occupying a Facility for a Complete Vocational Agricultural Program." Master of Education Integrating Paper, 1980, University of Minnesota, St. Paul.

Purpose. The purpose of this paper was to identify factors that facilitated planning, constructing, equipping and occupying a facility for a vocational agriculture program.

Method. A historical review of construction projects in other vocational agriculture programs was the first step. An analysis of the nine years of planning and work in constructing the new vocational agriculture facility in Owatonna, Minnesota, was completed to isolate critical factors.

Findings. Critical factors or processes in planning, constructing, equipping and occupying a facility were: teacher leadership, use of a decision making process, determination of potential student enrollment and teacher involvement in selection of the architect.

NORMAN, Thomas E. "Measuring Adaptive Behavior: A Comparative Study Between Trained and Untrained Parent and Teacher Ratings of a Select Group of Exceptional Children Using the AAMD Adaptive Behavior Scale--Public School Version." Ph.D. Dissertation, 1979, University of Minnesota, Minneapolis.

Purpose. The purpose of this study was to compare adaptive behavior ratings between selected groups of non-trained and trained parents and teachers, and to learn if either parents or teachers might be used to administer the AAMD-ABS (American Association on Mental Deficiency) and if training of those parents and teachers might heighten their concordance and increase their efficiency in the use of the instrument.

Method. Specific objectives of this study were: 1) to determine if parents and teachers, without training, perceived the adaptive behavior of the parent's child in the same way as measured by the AAMD-ABS; 2) to determine if the rating on the AAMD-ABS by both parent and teacher for a child would be altered significantly by training (parents and teachers); 3) to determine if training on the use of the AAMD-ABS would alter the parent's perception of the child relative to the teacher's perception of the child when both parents and teachers were subjected to the same training; 4) to compare the intra-rated reliability of test-retest observations in a two-week interval of two groups of non-trained teachers and parents; and 5) to test if there were similar concordance between the ratings of parents and teachers on 21 separate domains of adaptive behavior identified on the AAMD-ABS in Parts One and Two.

The statistical "t" (students) test was used to test the various hypotheses throughout this study.

Findings. Results of the study indicate that: 1) parents and teachers appear to rate children about the same prior to training on the use of the scale, and 2) when comparing trained parents to non-trained parents and trained teachers to non-trained teachers, there were significant differences, but on different parts of the test -- Part One for parents and Part Two for teachers. Trained parents tended to rate children as more normal on Part One when compared to non-trained parents, and trained teachers tended to rate children as more normal on Part Two when compared to teachers that were not trained.

While training produced more normal ratings by parents and teachers, it did not produce a consistent effect, in that the more normal ratings by trained parents and trained teachers were on different parts of the test.

RIESENBERG, Louis E. "An Investigation of the Agricultural Education Background for Accident Involved and Non-Involved Farm Tractor and Machinery Operators in Minnesota." Ph.D. Dissertation, 1980, University of Minnesota, St. Paul.

Purpose. The study was concerned with answering three questions: Was the distribution of work injuries in the 1978 Minnesota Farm Accident Survey significantly different from the distribution of work injuries compiled by the National Safety Council? What was the participation of farm tractor and machinery operators in Minnesota in agricultural education programs? Was there a difference in the participation in agricultural education programs between accident involved and non-involved operators?

Method. Using the procedures of the Standardized Farm Accident Reporting Program, a stratified random sample of farms grouped in clusters in 19 counties of Minnesota were surveyed four times during 1978 by volunteer interviews. The survey in each county was coordinated by the county extension staff with the training of the interviewers done by the state staff.

Findings. There was a significant difference in the distribution of work injuries between those of the 1978 Minnesota Farm Accident Survey and the "national norm" as compiled by the National Safety Council. The majority of farm tractor and machinery operators in Minnesota had not participated in vocational agriculture, the 4-H Power Program and the Tractor and Machinery Safety Program. Amount of experience, participation in vocational agriculture and amount of vocational agriculture completed were found to be slightly associated with accident involvement.

SCHAMS, David A. "Adult Agriculture Programs in Minnesota and Wisconsin." Master of Education Integrating Paper, 1980, University of Minnesota, St. Paul.

Purpose. The purpose of this study was to identify adult agriculture education programs of historical significance in the United States and to particularly identify and evaluate programs in Minnesota and Wisconsin.

Method. Previous studies and historical records were utilized in preparing a history of adult agriculture programs. Material for the identification and evaluation of the Minnesota and Wisconsin adult agriculture programs was gathered through interviews with local instructors, program enrollees, vocational coordinators, university staff, and state staff from the Departments of Public Instruction for Minnesota and Wisconsin.

Findings. A complete evaluation of all interviews and data received indicated several major differences in the type of adult education programs offered in Minnesota and Wisconsin. However, cost-benefit studies showed the same results in profitability for farm management classes in both states. So although delivery systems are different, farmers in both states are benefiting from the respective programs to a similar degree.

SCHROEDER, Dennis L. "An Evaluation of the Importance of Agricultural Machinery Competencies to Farmers in Southwestern Minnesota." Masters Study, 1980, University of Minnesota, St. Paul.

Purpose. The purpose of this study was to determine the importance farmers in southwestern Minnesota assign to performing specific agricultural machinery competencies in order to develop the most appropriate curriculum for agricultural machinery courses in vocational agriculture programs in southwestern Minnesota.

Method. The survey instrument contained 108 competency statements in three major sections: service and routine maintenance competencies for specific agricultural machines, general machinery competencies, and specific agricultural machinery competencies. Fifty-five farmers, randomly selected from adult programs in southwestern Minnesota, responded to the competencies with two response scales for each item. The importance of performing scale was Likert in nature ranging from 1 to 5 with 5 being essential. The "who performs" question had five possible responses: always myself (you, your family, or employees), usually myself, 50/50, usually agribusiness, always agribusiness (company, service or repair personnel) and does not apply. The data analysis was limited to compilation of the descriptive statistics.

Findings. The following conclusions were drawn based upon the data obtained. 1) The top six machines ranked in order of importance of performing service and routine maintenance were the row-crop planter, crop sprayer, combine, mold board plow, drilling equipment and field cultivator. 2) Of all machines surveyed, the performance of service and routine maintenance by agribusiness personnel was the highest for the anhydrous ammonia and the dry chemical application equipment. 3) One hundred percent of the farmers designed the top seven general machinery competencies as applying to their operation. These were: lubricate appropriate points; perform field adjustments; adjust equipment for initial operation; service, maintain and adjust belts, chains, pulleys, universals and other driveline parts; set-up tractor for equipment operation; read and interpret operator's manual; and service and maintain hydraulic and electrical parts. 4) Farmers designated the read and interpret operator's manual competency as the competency most likely to be performed themselves or usually themselves. 5) The top 17 specific competencies were all from the planting, harvesting and chemical application areas. A model outline for an intensive nine week agricultural machinery curriculum was developed as a result of the data obtained.

STAGER, Kenneth J. "Elements of a Comprehensive Environmental Education Program: A Plan for Developing a Program in Cooperation with the Agricultural County Extension Service and Public School System." Master of Education Integrating Paper, 1980, University of Minnesota, St. Paul.

Purpose. The purpose of this study was to identify the elements of a comprehensive environmental education program and to develop a program in cooperation with the agricultural county extension service, the city government, and the public school system.

Method. Environmental and educational information were integrated to develop a plan for developing a program.

Findings. The inputs from County Extension Services and the Public School should complement each other effectively in developing an environmental education program. Combining of the outdoor non-formal with the structured classroom appears to produce greater learning and more student participation than if the programs had been structured entirely within either of the separate units.

STENZEL, Kenneth R. "A Study Attempting to Establish the Validity of Dairy Farm Manager Competencies." Masters Study, 1979, University of Minnesota, St. Paul.

Purpose. The purpose was to establish the validity of the dairy farm manager competencies list in providing agricultural educators with a useful, sound basis for providing relevant and appropriate instruction for present and future dairy farm managers.

Method. Two groups of study participants were selected: 1) farm business management education instructors and 2) dairy farm managers enrolled in vocational agriculture adult farm business management instruction programs.

Twenty instructors were informed of the purpose of the study and invited to participate. The randomly selected, 13 participating instructors asked four of their dairy farm manager cooperators to complete the self assessment instrument. The instructor completed an assessment instrument for each of their dairy farm manager cooperators and a farm business analysis data sheet for each. The consistency of the farm business management education instructors ratings and the dairy farm manager cooperators self ratings were then determined.

Findings. The participants thoroughness in completion of the relatively long instrument was above expectation. The results showed an average absolute competency rating difference per item of .83 between the instructor (external) and the dairy farm manager (self) ratings. The average item rating difference of less than one, suggested adequate reliability in self assessment to assume utility in the dairy farm managers assessments of skill for the purposes of planning vocational programs.

MISSISSIPPI

BUCKLEY, Michael W. "An Analysis of Diffusion and Adoption of the Trial Point System Used by Soybean Producers in Lowndes and Oktibbeha Counties, Mississippi." Master of Science Thesis, 1980, Mississippi State University, Mississippi State.

Purpose. The major purpose of this study was to determine the degree soybean producers have adopted the trial point system developed to assist farmers in deciding profitability of applications of foliar fungicides on soybeans, and to determine how soybean producers utilized various channels of information in their decision-making process concerning the trial point system. The study had three major objectives: 1) to determine the degree soybean producers had adopted the trial point system; 2) to determine which channels of information were utilized by soybean producers in the stages of the adoption process of the trial point system; 3) to determine the differences in demographic characteristics between soybean producers who have adopted the trial point system and those producers who have not adopted it.

Method. A random selection of 100 soybean producers were involved in the study. Five producers were selected to be interviewed by telephone, 90 producers received the instruments by mail, and five producers were personally interviewed. The questionnaire obtained the demographic data of the soybean producers, an inventory of the diffusion-adoption process of the trial point system, and the communication agent support scale. Upon responses of the participants of these three major objectives the data were analyzed using frequencies, percentages, means and standard deviations. The Kruskal-Wallis One-Way Analysis of Variance, t-test, analysis of variance and Duncan's New Multiple Range Test were also used for analysis.

Findings. Major findings include: 1) fifty-seven percent were unaware of the trial point system; 2) twenty-seven percent were aware of the system but had not tried it; 3) twenty percent had tried the point system; 4) the county extension agent was the most frequently used channel at each stage in the adoption process; 5) those producers who had tried the point system were younger, had larger gross farm incomes, and were more likely to be full-time farmers who managed their own soybean operations.

MISSOURI

BURKE, Stanley R. "Effects of Temperature and Protective Clothing Upon Task Completion Time, Work Quality, and Student Perceptions of the Learning Environment." Doctor of Philosophy Dissertation, 1980, University of Missouri, Columbia.

Purpose. The purpose of this study was to ascertain the effects of temperature and protective clothing upon student performance and perceptions toward the learning environment.

Method. The sample of 197 students was drawn from a population of students in the 23 schools of the Blue Ridge supervisory area of Virginia that offered the course Agricultural Science and Mechanics I. Students within each class were randomly assigned to three groups and were asked to construct a project in the agricultural mechanics laboratory under a randomly assigned temperature of 50°F, 60°F, or 70°F. Group I students constructed the project without protective clothing while Group II students wore coveralls. Group III students performed the same task at a 67°F temperature without protective clothing. Measurements of task completion time, work quality, and perceptions toward the learning environment were taken. The experiment used a posttest only control group design. A one-way ANOVA was used to analyze the influence of temperature upon task completion time and work quality mean scores, separately. A two-way ANOVA was used to analyze the influence of temperature and protective clothing upon task completion time and work quality. A MANOVA procedure was used on the group mean scores to analyze the influence of temperature and temperature and protective clothing upon perceptions toward the learning environment.

Findings. Temperature and protective clothing were not found to influence task completion time and work quality in temperatures as low as 50°F during forty minutes of exposure. However, perceptions toward the learning environment were influenced by temperature and temperature and protective clothing. The most favorable perceptions occurred at 67°F and 70°F.

CARR, Brenda, "The Effectiveness of Ventilation Systems in Removal of Airborne Contaminants Produced by Arc Welding in Selected Missouri Vocational Agriculture Mechanics Laboratories." Doctor of Philosophy Dissertation, 1980, University of Missouri, Columbia.

Purpose. The purpose of this study was to analyze the effectiveness of ventilation systems in removing airborne contaminants produced by arc welding in vocational agriculture mechanics laboratories in Missouri.

Method. The population for this study included vocational agriculture mechanics laboratories in Missouri which have fans (wall and ceiling), drop curtains, hoods, boot pickups, and precipitators as ventilation systems. The sample consisted of five randomly chosen schools per ventilation system. Six students from each school welded constantly for one hour in order to produce measurable welding fumes and gases. Measurements of iron oxide, carbon monoxide, and ozone were taken and compared to OSHA standards in order to determine which ventilation system was most effective in removing airborne contaminants produced by arc welding. Two students, the teacher, and the area were monitored with air sampling equipment which collected iron oxide. Carbon monoxide and ozone were collected with hand-type pumps and detector tubes. The design for this study included descriptive, comparative, and experimental procedures.

Findings. The findings of this study are summarized below:

1. The boot pickup on the table was the only ventilation system studied which met the OSHA ventilation standards.
2. All ventilation systems exceeded the OSHA TLV-TWA standard for removal of iron oxide from the laboratory environment.
3. Carbon monoxide levels were within the OSHA TLV-TWA standard.
4. The fan and the drop curtain met the OSHA TLV-TWA standard for removal of ozone from the laboratory environment. The hood, boot pickup on the table and boot pickup above the table did not meet the OSHA TLV-TWA standard.
5. According to this study, the welding helmet did not diffuse iron oxide away from the breathing zone of the welder in four out of five systems.
6. The students were exposed to a greater amount of iron oxide while welding than the teacher while supervising the welding.
7. Teacher and students were exposed to levels of iron oxide which exceeded OSHA standards.

CLAYCOMB, Donald M. "Identification of Activities That Would Create an Awareness of and Access to Agricultural Occupations by Females." Staff Study, 1980, University of Missouri, Columbia.

Purpose. The purpose of this study was to identify a list of activities that would create an awareness of the opportunities for females to become employed in agricultural occupations and to identify a list of activities that would provide access of females presently employed in or hoping to become employed in agricultural occupations.

Method. An advisory committee was utilized to identify activities. The activities were then evaluated by the committee, teacher educators, and state supervisors utilizing a Likert-scale.

Findings. Fifteen activities were identified and ranked that would create an awareness while 20 activities were identified and ranked that would provide access or upward mobility.

DEAN, Edwin D. "Standards for Evaluation of Vocational Education Programs in Missouri as Perceived by a Jury of Experts." Doctor of Education Dissertation, 1980, University of Missouri, Columbia.

Purpose. The purpose of this study was to ascertain the perceived importance of standards for evaluation of vocational education programs in Missouri.

Method. The procedure consisted of collecting data with three successive rounds of a Delphi instrument. The selected respondents consisted of 36 persons involved in vocational education in Missouri. The following were compiled: 1. The major categories of evaluative criteria were arranged from high to low. 2. The standard statements grouped by major categories were arranged from high to low. 3. A composite of respondent comments and suggestions was compiled. 4. Chi Squares were computed for each major category to determine if a significant difference existed (at the 0.05 level) among the response patterns for rounds one and three.

Findings. Seven major categories were perceived as being important. These were Curriculum and Instruction, Placement and Follow Up, Administration, Student Recruitment and Selection, Facilities and Equipment, Philosophy and Objectives, and Efficiency and Effectiveness. Four major categories were perceived as being somewhat important. These were Public Relations, Advisory Committees, Ancillary Services, and Student Organizations. Forty-eight standard statements were perceived as being important; thirty-four as being somewhat important. Using the Chi Square, significant difference existed between rounds one and three for all major categories except for Curriculum and Instruction.

GOODE, James K. "Priorities of Missouri Vocational Agriculture Teachers for Civic, Self, Family, and Teaching Activities." Doctor of Philosophy Dissertation, 1980, University of Missouri, Columbia.

Purpose. The primary purpose of the study was to ascertain the priorities that teachers of vocational agriculture in Missouri set for civic, self, family, and teaching activities. Secondary purposes were to ascertain if differences existed among the teachers with regard to priorities for the activities and if a program planning workshop caused change in their priorities.

Method. The population consisted of 217 Missouri vocational agriculture teachers who attended a workshop in the fall of 1979 and rated 35 activities by priority. Duncan's Multiple Range Test was used to analyze the means of the activities. Analysis of variance was used to test for differences among the teachers when grouped by demographic variables. An experimental approach was utilized to evaluate effects of the workshop.

Findings. The mean rating of each activity was found to be significantly different from at least 27 of the other 34 activities. Teaching local day classes, local FFA activities, and production and placement programs were rated highest. Several significant differences were found in the priority ratings of teachers when compared on the basis of each of 14 demographic variables. After the workshop, teachers rated family life on weekends higher, they gave lower ratings to paper work required locally, staying current in agriculture, and supporting all school activities.

GOTT, Richard E. "Professional Education Competencies Needed by Teachers of Vocational Agriculture in Missouri as Perceived by Superintendents, Principals, Area Vocational-Technical School Directors, and Agricultural Educators." Doctor of Philosophy Dissertation, 1980, University of Missouri, Columbia.

Purpose. The primary purpose of this study was to verify the professional education competencies needed by teachers of vocational agriculture in Missouri as perceived by secondary school administrators in schools having programs of vocational agriculture and to compare the perceptions of administrators of secondary vocational agriculture programs, vocational agriculture teachers, teacher educators, and state supervisors of agricultural education.

Method. Data were collected by use of a questionnaire. The sample included 41 principals, 23 vocational-technical school directors, 48 superintendents, 70 vocational agriculture teachers, 9 teacher educators, and 6 state supervisors. Data were analyzed using chi-square and multivariate analysis of variance statistical procedures. The instruement used the forced-response method on a six-point Likert-type scale. The 209 competency statements used on the opinionnaire were identified and verified for Missouri conditions.

Findings. The views of principals, directors, superintendents, and teachers were generally congruent in the importance of the professional education competencies. Teachers and superintendents were more critical of the professional education competencies than the other groups of educators. The perceptions of teachers were not congruent with the other groups of educators in the categories of program planning, development and evaluation, instructional planning, instructional evaluation, and adult/young farmer education. Superintendents did not view supervised occupational experience programs to be as important as the other groups of educators.

KIRTS, Carla A., and CLAYCOMB, Donald M. "Student Teaching Management in Agricultural Education: A National Study." Staff Study, 1980, University of Missouri, Columbia.

Purpose. The purpose of this study was to provide data which described the current state of the art in the management of student teaching in agricultural education on a nationwide basis.

Method. The Student Teaching Management Questionnaire, a self-designed instrument validated by panel review, was mailed to teacher education institutions within the 48 contiguous states. Tables were used to provide a summary of responses to the questionnaire, including percentage of institutions and percentage of students affected per response.

Findings. The results indicated that diverse student teaching management procedures and requirements were used in the preparation of vocational agriculture teachers. Results are indicative of the procedures and requirements used in the management of student teaching. The experiences to which student teachers were exposed are also described. The range for selected variables studied was: length of student teaching was 6-18 weeks, hours teaching high school students was 20-360, teaching adults/young farmers was 0-60, number of student teachers per cooperating center was 1-3, and the number of visits by staff per center was 1-10.

LIGHARI, Abdul L. "Professional Education Competencies Needed by Teachers of Vocational Agriculture in Missouri." Doctor of Philosophy Dissertation, 1979, University of Missouri, Columbia.

Purpose. The study was designed to identify and verify the professional education competencies needed by teachers of vocational agriculture in Missouri.

Method. The population for this study consisted of all the teachers of vocational agriculture in the state of Missouri, the state supervisors, and nine teacher educators of agricultural education in the state of Missouri. The study used all the teacher educators, state supervisors, supervising teachers, and 20 percent of the non-supervising teachers. Respondents were asked to rate 209 competencies on a six-point Likert-type scale. A t-test was used to compare the perceptions of joint staff members regarding the importance of professional education competencies. An analysis of variance was used to determine if there was a significant difference between various groups of teachers based on selected demographic characteristics. An alpha level of .10 was used to test all hypotheses.

Findings. Based on the findings, it was concluded that all 209 professional education competencies studied were regarded as important for teachers of vocational agriculture in Missouri, that joint staff members place more emphasis on the importance of professional education competencies than do incumbent teachers, and, that the ratings of teachers will differ based on their experience and teaching situation.

MONTANA

GODFREY, Dale Walter "Use of a Greenhouse in Teaching Field Crop Production." Master of Science Professional Paper, 1980, Montana State University, Bozeman.

Purpose. The purpose of this study was to determine the educational benefits of using a greenhouse in teaching principles of field crop production in agriculture classes in Montana, specifically in the areas of; Plant Growth, Development, and Production; Soils; Range Management; and Agriculture Chemicals and Pest Control.

Method. Data were collected from the teachers in vocational agriculture departments in Montana, North Dakota, South Dakota, Colorado, Washington, and Idaho. A questionnaire was sent to the head teachers in those departments where greenhouses were being used in vocational agriculture departments.

Findings. Major findings include: (1) the competencies needed in field crop production in Montana were being taught through the use of the greenhouse; (2) a greenhouse could be justified to teach a crop production class; and (3). students could learn many competencies needed in field crop production by raising and selling bedding plants.

SMITH, George Douglas "The Role of the Governor's Ad-Hoc Committee on Agriculture in Determining Agriculture Policy in Montana". Master of Science Professional Paper, 1980, Montana State University, Bozeman.

Purpose. The purpose of this study was to determine the perceptions of selected individuals and groups about the role of the Governor's Ad-Hoc Committee on Agriculture in determining agriculture policy in Montana.

Method. One-hundred-seventy-five questionnaires were mailed to the study population. The population included members of the farm organizations and commodity groups, organizations/ associations, MSU department heads, USDA agency heads, Montana media, agriculture media, Montana Executive Branch, congressional delegation, Senate Agriculture Committee and the House Agriculture Committee.

Findings. Major findings include: (1) Montana farm organizations and commodity groups have a more harmononious relationship in 1980 as compared to 1971, (2) controversial issues should not be discussed and voted upon at Ad-Hoc meetings, (3) the Governor's Ad-Hoc Committee is not the only public forum for the agriculture community, (4) goals and objectives of the Governor's Ad-Hoc Committee are not clearly defined or understood, and (5) the Governor's Ad-Hoc Committee on Agriculture is a sounding board for new proposals and ideas.

NEBRASKA

DILLON, Roy D. "A Study of the Involvement By Nebraska Vocational Education Secondary School Advisory Councils In the Preparation of the Local Plan For Vocational Education." Staff Study, 1980, University of Nebraska-Lincoln, Nebraska.

Purpose. To determine the extent to which members of the local school staff and the vocational education advisory council are involved in preparing the local plan for vocational education.

Method. The school faculty person who had the responsibility for coordinating vocational advisory council activities and the chairperson of the local secondary vocational education advisory council were interviewed, from a random sample of 28 percent of the secondary schools in Nebraska that had reimbursed vocational education programs. A total of sixty-one schools were in the sample.

Findings. Ninty-five percent of the schools had organized councils. Agriculture, business and office, home economics teachers, principals, and superintendents were the most heavily involved as faculty representatives in preparing the local plan. Just over half the advisory councils were involved in collecting information, and making recommendations. Nine different procedures were reported as used for making annual changes in the local plan, with only four of these procedures involving the advisory council. The primary role of the faculty representative was to provide leadership in organizing and educating the local council on its functions. Faculty representatives' responses indicated significant differences between knowledge had and knowledge needed on nine knowledge areas concerning preparation of the local plan for vocational education.

NEW YORK

BACH, Frederick W. "Ten Exploratory Units in Agricultural Mechanization." Master of Professional Studies Project, 1980, Cornell University, Ithaca.

Purpose. The purpose of the project was to provide teaching units for student exploration in agricultural mechanization.

Method. Need for the units was determined by a teacher committee. Units titles were selected to provide a broad representation of the agricultural mechanization area. The format used was objectives, background information, materials needed, teacher demonstration and student worksheet. Field-testing was by teachers of agriculture. The units were then developed in final form based on field test data.

Findings. The ten exploratory units in agricultural mechanization were published and offered for sale by the Cornell Instructional Materials Service. Initial teacher acceptance of the units has been positive.

BELLARD, Victor Isaac. "Competency Based Professional Education Faculty Development Needs of Post-Secondary Level Agricultural Instructors in New York State." Ph.D. Dissertation, 1980, Cornell University, Ithaca.

Purpose. The primary purpose of the study was to identify the professional education (pedagogical) faculty development (inservice) needs of agricultural instructors in State University Agricultural and Technical Colleges in New York State and to determine if differences exist among instructional area groups regarding perceived faculty development needs.

Method. The population consisted of 146 New York Agricultural and Technical College agricultural instructors and their coordinators and Department/Division heads. Data were collected by administering a survey instrument which included demographic data and a list of 182 professional education (pedagogical) competencies. The instrument provided for the determination of faculty development need in each competency as well as the determination of frequency of use for and knowledge about each competency. Comparisons among participants grouped by their instructional specialization area were made.

Findings. It was determined that (1) no significant differences in response exist between agricultural instructors of Animal Science, Plant Science, Agricultural Business, and Agricultural Engineering Technology regarding their need for faculty development instruction. (2) Participants perceived 145 professional education competencies as being average or above in faculty development need while 37 other competencies were perceived as being below average or low in faculty development need. (3) Twenty-six clusters of competencies were perceived to be well above average in faculty development need while only six clusters were perceived to be below average. (4) Twenty percent or more of the agricultural faculty lack sufficient knowledge to make rational decisions regarding whether or not to include 24 specified competencies in their teaching plans. (5) Twenty-three specified competencies are not used by 30% or more of the agricultural faculty.

CUNNINGHAM, Bruce Edward. "A Survey of the Advisors of the Future Farmers of America Chapters in New York State Concerning the Superior Chapter Award." Master of Science Thesis, 1980, Cornell University, Ithaca.

Purpose. The primary purpose of this study was to determine the activities of the outstanding FFA chapters in New York State, as identified by the Superior Chapter Award Contest. Secondly, this study was to determine why FFA chapters in New York State are not competing for the Superior Chapter Award.

Method. A mail questionnaire was sent to one advisor of each FFA chapter in New York State. The survey instrument was a checklist of different chapter activities divided under the eleven divisions of the Superior Chapter Award. The results were tabulated to determine the mean and/or percentage of each activity that could have been identified by the total number of respondents in that category.

Findings. Major findings of this study were as follows: The reason listed most often for not completing the Superior Chapter Award Application was that the Chapter did not meet the 36 minimum standards; the activities done the most often under the 11 divisions were: Supervised agricultural occupational experience - promoting chapter competition by local chapter contests or shows, cooperation - working with local high school teachers on student and chapter projects, community service - sponsoring and engaging in a fair or show as a chapter. leadership - training all new members in parliamentary procedure in special sessions, earnings, savings and investments - selling citrus fruit, conduct of meetings - conferring Greenhand degrees, scholarship - presenting awards for high scholastic achievement, recreation - holding annual picnics, banquets or parties, public relations - articles written for local newspaper, participation in state and national activities - attending state convention, and alumni relations - using alumni as judges for local chapter contests.

CUSHMAN, Harold R. "Curriculum Content for the Professional Preparation of Lecturers for Department of Primary Industry Colleges in Papua New Guinea." Staff Study, 1980, Cornell University, Ithaca.

Purpose. The purposes of this study were to: (1) identify the professional education (pedagogical) tasks performed by lecturers; (2) select those tasks that warrant inclusion in a training program for prospective lecturers; and (3) determine the performance level to which each such task should be developed.

Method. Task inventory questionnaires were utilized to obtain (1) desired task occurrence data from college administrators and (2) task significance data from lecturers in the colleges.

The level of task development warranted for each task was predicted by a multiple regression formula developed in previous studies.

Findings. The evidence supplied by college administrators regarding "desired task occurrence" and by lecturers regarding "task significance" overwhelmingly supports the relevance of 198 professional education (pedagogical) tasks to the occupation of lecturer in D.P.I. colleges.

The professional education tasks performed by lecturers vary in significance from "a most significant part of the job" to "a minor part of the job." Likewise, the performance level to which each of the 198 tasks need be developed varies from "highest possible level of proficiency" to "basic ability to do."

KAPRAL, Richard L. A Study of Occupational and Educational Aspirations and Expectations of Agriculture Students at State University of New York Agricultural and Technical Colleges. Ph.D. Dissertation, 1980, Cornell University, Ithaca.

Purpose. The purpose of this study was to identify the occupational and educational aspirations and expectations of agriculture students at State University of New York Agricultural and Technical Colleges. In addition, the study sought to identify those problems students may have in achieving their occupational and educational goals; and if their aspirations are significantly related to certain socioeconomic factors and the students' levels of self-concept.

Method. A questionnaire was administered to 131 freshmen and 143 senior agriculture students. Information relating to (a) levels of aspirations and expectations for jobs and education, (b) socioeconomic backgrounds, (c) self-concepts, (d) problems affecting achievement of aspirations, (e) value perceptions pertaining to jobs, (f) influences on decision to study agriculture, (g) time when career choices were made, (h) influence of college persons on career decisions, and (i) assessment of college efforts in providing job information were requested by the survey instrument. Statistics used to present and analyze the datea were: (a) frequencies, (b) percentages, (c) chi square, (d) Cramer's V, and (e) Pearson's R values. The Tennessee Self-Concept Scale was administered as a means of determining student self-concept levels.

Findings. Statistically significant relationships were observed for freshmen and senior students between their levels of aspirations and expectations for occupations and education. Both groups indicated lower expectations for jobs and education as compared to their aspiration levels. A majority of all students preferred and expected jobs in the medium-level category, a level consistent with their present educational training. A tendency existed for students who expected employment in medium-level occupations to expect more education than is necessary for these jobs.

Students cited the following reasons for differences between the levels of their occupational and educational aspirations and expectations: (a) lack of financial resources, (b) lack of academic ability, (c) lack of motivation, and (d) preference to go to work.

A number of socioeconomic factors were observed to be related to student aspirations and expectations, namely: (a) sex, (b) college grades, (c) home residence, (d) farm experience, (e) size of home community, (f) father's educational level, (g) father's occupational status, (h) influence on decision to study agriculture, and (i) whether career interest tests were taken.

Students cited most often the importance of family and work experience as being most influential on their decision to study agriculture, with a majority indicating they made their decision regarding career choice during high school.

Students indicated the following college persons to be most influential regarding career plans: (a) friends, (b) teachers within their major, and (c) their academic advisors. In choosing a job, students felt their most important considerations would be the kinds of people they would work with, and the income received.

Student self-concept levels were not significantly related to any of the dependent variables investigated. A majority of all students studied had low self-concepts, with seniors as a group showing higher self-concept levels than freshmen.

KYROS, William. "A Conceptual Framework for the Analysis of In-service Teacher Education in Occupational Education." Ph.D. Dissertation, 1980, Cornell University, Ithaca.

Purpose. The purpose of this study was to organize existing knowledge of teacher in-service education to provide a comprehensive perspective that would facilitate the qualitative as well as the quantitative assessment of its effectiveness. Specific objectives leading to the attainment of the purpose were: (1) to develop a conceptual framework that structures in-service education as a system and (2) to apply the framework by using an existing in-service education program as a subject system.

Method. General system theory and system engineering methods were interpreted and used in the construction of a framework and in the analysis of a real in-service teacher education program. A broad-scoped, open system framework was constructed using three distinct but complementary system models. They are identified as the system-environment, spatial-structural, and dynamic process models. Each was defined by a set of interrelated system concepts and principles that could in turn be related to real systems to identify problems of relevancy, rationality and effectiveness in their design.

A system analysis of real in-service teacher occupational education program was performed to examine the adequacy of the framework and to analyze a real world system.

Findings. The system analysis of the real in-service teacher education program revealed discrepancies between the framework and the system being examined. By addressing these discrepancies specific areas were identified for improvement. Additional inquiry was implied for two major areas of in-service education-goal or outcome clarification and effectiveness determination. Thus, it was found that examining existing research in education within the context of the framework was helpful in identifying areas of needed research.

In essence, this study found that the critical use of conceptual frameworks based on system models was helpful in improving our understanding of the in-service teacher education in occupational education and useful in guiding future research.

SCHEMPP, Sandra Anna Sheradin. "Perennial Plants for Garden Design: Identification, Care and Use." Master of Professional Studies, 1980, Cornell University, Ithaca.

Purpose. The purpose was to meet the needs of New York State horticulture teachers as identified by the Instructional Materials Service Advisory Board. They had requested a detailed instructional packet for use in high school horticulture programs. The subject requested was perennial plant identification, care and use. The packet was to consist of a teachers manual, a student manual, a set of slides and an audio tape presentation for use in individualized student study.

Method. Data was collected from horticulture reference books, text books, catalogs and many small leaflets for 36 of the most common perennials of New York State. This information was consolidated to include introductory data concerning plant structures, garden design and facts about individual plants. The facts for each plant included: blooming period; flower structure; flower color; foliage type; site conditions; climatic conditions for best growth; native area; advantages of the plant; problems with growing the plant; how to propagate it; an ink sketch of the plant and a color slide of each.

Findings. The packet is being produced and distributed through the Cornell Instructional Materials Services. It includes a teacher manual of 94 pages, student manual of 94 pages, a colored slide set of 60 slides and three one-hour cassette tapes. The packet is to be used by teachers for individualized programs, independent study projects, class lectures, discussions and also by extension agents. The packet can be purchased for $28 from Instructional Materials Service, Stone Hall, Cornell University, Ithaca, New York 14853.

WHITEMAN, Linda D. "New York State Adult Education in Agriculture: A Study of the Influence of the Characteristics and Perceptions of Vocational-Agriculture Teachers in Offering Programs for Adults." Master of Science Thesis, 1980, Cornell University, Ithaca.

Purpose. This study sought to examine some of the factors which may have contributed to the decline of adult education in agriculture programs offered by the vocational-agriculture teachers of New York State.

Method. Two separate questionnaires were developed and 240 of these were mailed to a proportional random sample of vocational-agriculture teachers in New York State. Data analysis consisted of one-way analysis of variance and Pearson's Product Moment Correlation.

Findings. It was found in the population of agriculture teachers surveyed that approximately 20 percent were conducting courses for adults, 45 percent have conducted courses in the past but have since discontinued the practice, and that 35 percent have never conducted courses for adults. There were no differences among these three groups of agriculture teachers with respect to twelve of the seventeen demographic characteristics investigated. Teacher demographic characteristics and the eight independent variables studied had little impact upon the presence or absence of adult education in agriculture programs. Teachers, who want to offer courses for adults, want to work basically with adult education in a team-like atmosphere with other agricultural professionals, want to offer courses due to evidence of adult interest, would like more funding for programs, want more time for preparation, and consider a needs assessment of adults important. The agriculture teachers surveyed perceived that other organizations did not adequately satisfy needs for adults in a community; however, they believe that other organizations involved with agriculture should do the bulk of the adult education in a community. The study suggests that the major reason for the low percentage of teachers conducting adult programs in agriculture is a structural problem. That is, the administration may not encourage the teachers to offer courses and the uneven distribution and lack of funding for adult courses discourages these teachers from offering courses. Finally, agriculture teachers, in general, do not believe that there is a market for adult education in agriculture programs because adult participation is low and needs of adults are ill-defined.

NORTH DAKOTA

MACK, Gregory L. "Determining the Extent to Which Mainstreaming of Handicapped and Disadvantaged Students is Accepted and Used in Secondary Vocational Agriculture Programs in North Dakota." Master of Science Colloquium Paper, 1980, North Dakota State University, Fargo.

Purpose. The purpose of this study was to determine how educating handicapped and disadvantaged students in the least restrictive environment is accepted and practiced by the secondary level Vocational Agriculture instructors in North Dakota.

Method. A mail questionnaire was deemed the most appropriate method of collecting data to satisfy the objectives of this study. It was developed and sent to the 112 secondary Vocational Agriculture instructors in North Dakota. Telephone and mailed follow-ups were made and an 87.6 percent response was received.

Findings. A total of 74 percent of the responding instructors indicated that handicapped and disadvantaged students were mainstreamed into their classes. Of the 26 percent who indicated these students were not mainstreamed, 68 percent reported they felt they could handle mainstreaming of the handicapped and disadvantaged and 76 percent indicated they would be willing to try mainstreaming. A lack of time, identifying students with special needs, lack of proper facilities, and understanding the concept of mainstreaming were identified as the major obstacles to overcome in using mainstreaming.

MIGLER, Jerome R. "North Dakota Agribusiness Employment Opportunities and Training Needs in the Agricultural Implement Industry." Master of Science Colloquium Paper, 1980, North Dakota State University, Fargo.

Purpose. The purpose of this study was to determine the extent of current and anticipated employment in the agricultural implement industry in

North Dakota. Data collected included full and part-time employment, employee replacement needs, projected expansion or decline in numbers of employees, education types and levels desired by employer for specific occupations, prior employee work experience desired by employers, and occupations within the business that require agricultural competencies.

Method. A direct mail questionnaire was developed and reviewed by other researchers and selected implement dealers prior to being mailed to the 320 implement dealership managers in North Dakota. Two additional follow-up mailings were used and a 71% response rate was attained. Telephone follow-up was used to clarify and verify some responses.

Occupations within the agricultural implement industry were identified along with the education and prior work experience desired by employer for each occupation. Annual replacement needs were estimated and employment projections were made for a five-year period. These were done using a ratio-proportion procedure to calculate the projection for the population. Employment data were also compared to the latest available issue of County Business Patterns for North Dakota.

Findings. The agricultural implement industry in North Dakota had experienced significant growth in employee numbers from mid-March 1974 to May, 1978. In May 1978 the managers of these businesses projected an increase in employment needs through 1981. The dealers expected to employ a total 3,669 full-time and 725 part-time employees in 1981.

Nine occupational titles or clusters in the agricultural implement industry were identified. The occupational cluster having the greatest number of workers was the mechanic-service technician group. The occupational cluster having the fewest employees was that of clerical-clerical combination. The majority of employees in all clusters except those of bookkeeper-bookkeeper combination and clerical-clerical combination were listed as needing agricultural competencies.

A comparison of the survey data was made to published data in County Business Patterns. These two sets of data were found to be very consistent.

RHEAULT, Keith W. "North Dakota Agribusiness Employment Opportunities and Training Needs Within Five Selected Agribusiness Industries." Master of Science Colloquium Paper, 1980, North Dakota State University, Fargo.

Purpose. The purpose of the study was to determine the extent of agricultural employment in North Dakota among selected agribusiness industries to include: full and part-time employment, employee replacement needs, projected expansion or decline in numbers of employees, educational levels desired by employers for specific occupations, work experience needed by employees, and occupations that require agricultural abilities.

Method. Questionnaires were mailed to owners and managers in five agribusiness industries encompassing the entire state of North Dakota. The five industries selected for the study included the grain industry, the horticulture related industry, the dairy products industry, the meats industry, and the veterinary service industry.

Occupations were identified along with the education and prior work experience desired by employers for each occupation. Employment projections were made for a five-year period and annual replacement needs were estimated. Estimates of employment data for each industry resulted from the application of a ratio-proportion procedure from which the total industry employment projections were calculated.

Findings. The total number of full and part-time jobs available within the selected agribusiness industries in North Dakota are estimated to continue to increase during the next three years. In all industries, a high school graduate with either a general or vocational program background possessed enough entry level training for many of the occupational positions. A lower percentage of part-time employees needed agricultural abilities in their work than did full-time personnel. Work experience was not necessary for many of the occupational positions, especially in the less technical occupations. The annual replacement needs for each industry showed a turnover rate that was much higher for part-time employees than for full-time employees.

WONGSAMUN, Chaicharn. "Selected Characteristics and Perceived Training Needs of Adult 4-H Organizational Leaders in North Dakota." Master of Science Colloquium Paper, 1980, North Dakota State University, Fargo.

Purpose. The objectives of this study were: 1) to determine selected characteristics of adult 4-H organizational leaders in North Dakota, 2) to determine and compare the influences of selected persons and factors upon individual's decision to become a 4-H leader, and 3) to determine and compare perceived training needs for selected tasks of adult 4-H organizational leaders.

Method. A questionnaire was developed and sent to 300 adult 4-H organizational leaders in 10 selected North Dakota counties to gather data needed for the study. In determining the influence of selected persons and factors, rating scores for four levels of influence were assigned; 3-much; 2-some; 1-little; and 0-none. The assignment of rating scores for the level of perceived training needs of the leaders was done in the same way. Chi-square analysis was used for the comparison.

Findings. About two-thirds of the leaders were females. The majority were between 26 and 46 years of age. More than three-fourths of the volunteers had their own children in 4-H. Most of the leaders, 73.7 percent, lived on farms and 66.7 percent had been living at the same residence for more than 10 years. Approximately 90 percent of the leaders had at least high school education. Sixty percent of the respondents had been 4-H members. More than 80 percent spent 10 hours or less in 4-H each month. Children of 4-H leaders and wanting to work with youth were rated as the most influential person and factor. There was a significant difference in some selected persons and factors when comparing their influence by sex of the leaders. Helping, understanding, encouraging, and teaching boys and girls were areas for which most of the leaders felt most need for training. A significant difference was found in some selected tasks when comparing training needs by leaders' sex, tenure, and experience as 4-H members. No significant differences were found in any training areas according to their level of formal education or experience as volunteer leaders prior to becoming 4-H leaders.

OHIO

ABD-RAHMAN, Zakaria Bin. "Functions of Agricultural Advisory Committees In Selected Ohio High Schools." Master of Science Thesis, 1980, The Ohio State University, Columbus.

Purpose. A study was initiated to determine the functions of the agricultural advisory committees serving vocational agriculture programs in selected Ohio high schools.

Method. Instruments were sent to the agricultural teachers and members of the advisory committees to determine their opinions on the appropriate functions of advisory committees.

Findings. Functions which were considered appropriate were (1) reviewing equipment and facility needs, (2) providing course content advisement, (3) assisting in community public relations, (4) evaluating curriculum, facilities, staff and students, (5) assisting students with job placements and (6) becoming or securing resource persons. Generally, advisory committees were not well organized and their attributes not fully utilized by the agricultural teachers.

AZRAG, El-Sadig El-Fadil. "Perceptions of Agricultural Mechanics Professors, Agricultural Production Teachers, Regional Service Managers and Farmers Concerning an Instructional Sequence for Teaching Farm Tractor and Machinery Operation." Doctor of Philosophy Dissertation, 1979, The Ohio State University, Columbus.

Purpose. This study was designed to establish an instructional sequence for tractor and farm machinery operation training program. The specific objectives for the study were to determine the order for teaching seven types of farm equipment, to determine the competencies that are needed in an operator training program, to determine the order for teaching those competencies for which the order of teaching is important, and to compare the perceptions of the four groups surveyed regarding the sequential order for teaching the operations of tractor and farm machinery.

Method. A three-part questionnaire consisting of seven classifications of farm implements, 14 understanding and 20 ability competencies relative to tractor operation, seven understanding and ability competencies relative to moldboard plow operation and six understanding and ability competencies relative to combine harvester operation was developed from previously conducted research and curriculum studies. The list of the 47 competencies included in the questionnaire was validated by a 5-member panel of experts and the questionnaire was field tested. The questionnaire also included a general information section used to obtain demographic variables pertaining to the four groups surveyed for the purpose of describing respondents: all 35 agricultural mechanic university professors in the United States, a random sample of 50 agricultural production teachers in Ohio, all 46 regional service managers representing six major agricultural equipment manufacturing companies in the United States and a sample of 50 grain production farmers in Ohio.

These groups were selected to participate in this survey because of their experience and involvement in teaching tractor and farm machinery operation and maintenance. Respondents returned 155 usable questionnaires; 85.6 percent was the response rate.

Means, standard deviations, frequencies and percentages were the statistics obtained. The one-way analysis of variance test was used to compare the groups.

Findings. In order to compare the perceptions of the four groups regarding their recommendations for the order of teaching the 47 competencies, 20 competencies were drawn at random and the results of the one-way analysis of variance tests revealed that there were no significant differences at an alpha level of .05 among the groups regarding the order for teaching 16 competencies. The differences among the groups regarding the order for teaching three of the remaining four competencies could not be traced to the groups as indicated by the results of the post hoc tests.

BARRETT, John David. "Assessment of the Factors Affecting Readiness for Program Change of Professional Non-Faculty 4-H Field Staff of the Virginia Polytechnic Institute and State University Extension Division." Doctor of Philosophy Dissertation, 1979, The Ohio State University, Columbus.

Purpose. The major purpose of the study was to determine the relationship between factors called, "the variables contributing to an agency's openness and skill in effecting program change," "the criteria used in evaluating a program," "the variables contributing to resistance to program change," and selected demographic factors of Extension agents of the Virginia Polytechnic Institute and State University Extension Division having a major responsibility for 4-H programming.

Method. The study population consisted of a census of the local unit Extension agents in the Virginia Extension Division with a major responsibility for 4-H programming. The 146 Extension agents involved in the study were identified by area program leaders as having a major responsibility for local unit 4-H programming. Data were collected by mail questionnaires mailed to the subjects on June 22, 1979. Completed questionnaires were received from 138 of the 146 subjects.

Findings. The findings revealed that there were significant differences in the mean level of response to the factors, "the variables that contribute to an agency's openness and skill in effecting program change" and "the criteria used in evaluating a program" by size of local unit 4-H staff. Extension agents that were members of larger 4-H staffs scored higher on both factors. The findings also revealed that older Extension agents scored significantly higher on the factor, "the variables that contribute to an agency's openness and skill in effecting program change," while younger agents scored significantly higher on the factor, "the variables contributing to resistances to program change." Additionally, the findings indicated that Extension agents in the lower position classifications scored significantly higher on the factor, "the criteria used in evaluating a program."

BARRICK, R. Kirby Jr. "The Relationship Between State-Level Administrative Structure and the Role of State Supervisors of Vocational Agriculture." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The study was designed to answer the following questions: (1) What are the characteristics of state-level administrative structures for vocational education? (2) What is the current role of state supervisors of vocational agriculture as perceived by high school teachers and state supervisors of vocational agriculture? (3) What is the expected role of state supervisors of vocational agriculture as perceived by high school teachers and state supervisors of vocational agriculture? (4) What is the relationship between current and expected roles of state supervisors of vocational agriculture? (5) What is the relationship between state-level administrative structure for vocational education and current and expected roles of state supervisors of vocational agriculture?

Method. Data were collected from the 50 head state supervisors of vocational agriculture concerning the relative position of vocational agriculture in the state education agency hierarchy and the degree of contact between state supervisors of vocational agriculture and local programs in regard to functions performed by state supervisors. From these data, the 50 states were categorized into four groups based on state-level administrative structure. The target populations for the second phase of the study were the high school teachers of vocational agriculture in the United States and the state supervisors of vocational agriculture in the United States. States were randomly selected from each of the four state-level administrative structure groups. From the lists of teachers of vocational agriculture in the 19 selected states, 504 teachers were randomly selected. All 196 state supervisors of vocational agriculture were participants in the study. Teachers and state supervisors indicated their perceptions of the degree of authority state supervisors and local school personnel have for each of 37 activity statements on the instrument. Respondents indicated their perceptions for both current role and expected role. Data were collected by mail questionnaire, with 76.5 percent of the teachers and 87.7 percent of the supervisors providing useable responses.

Findings. State supervisors perceive that they currently have a slightly higher degree of authority for the activities than teachers perceive them to have. State supervisors perceive that their expected degree of authority should be slightly higher than teachers perceive it should be. State supervisors perceive that the degree of authority of local personnel is slightly higher than teachers perceive it to be. Teachers perceive that the expected degree of authority of local personnel should be slightly higher than supervisors perceive it should be. Low to negligible relationships exist between state-level administrative structure and the degree of authority of state supervisors of vocational agriculture.

BOWEN, Blannie E. "Job Satisfaction of Teacher Educators in Agriculture." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The major focus of the investigation was to describe and explain the job satisfaction of teacher educators in agriculture. The investigator sought to identify variables that are related to teacher educators' job satisfaction and to determine the proportion of variance in job satisfaction scores explained by these variables. The variables selected for investigation were based upon the research of Herzberg (1959) who theorized that job satisfaction and job dissatisfaction are mutually exclusive concepts with each concept being influenced by a different set of factors.

Method. A list of teacher educators in agriculture was compiled from the 1978-79 Directory of the American Association of Teacher Educators in Agriculture and verified by a panel of faculty and graduate students in the Department of Agricultural Education at The Ohio State University. A random sample of 100 teacher educators was proportionally drawn from the 1862 land-grant, 1890 land-grant, and nonland-grant institutions. Part I of the instrument was a modified version of a scale developed by Wood to assess the 10 Herzberg motivator-hygiene factors. Part II measured job satisfaction and consisted of 14 items from the Brayfield-Rothe Job Satisfaction Index. Part III was used to collect data to describe the sample.

Findings. The major finding of the investigation was that the teacher educators had a very high level of job satisfaction. Also, the following groups of teacher educators did not differ in their levels of job satisfaction: (1) tenured and non-tenured faculty, (2) assistant, associate, and full professors, and (3) 1862 land-grant, 1890 land-grant, and nonland-grant teacher educators. The teacher educators' satisfaction with institutional policy and administration was the best predictor of their job satisfaction. All 10 of the Herzberg motivator-hygiene factors (achievement, advancement, interpersonal relations, policy and administration, recognition, responsibility, salary, supervision-technical, the work itself, and working conditions) were positively correlated with the teacher educators' job satisfaction. No relationships were found between job satisfaction and (1) the teacher educators' age, (2) their years of high school vocational agriculture teaching experience, (3) their years in present position, (4) their total years as a teacher educator, and (5) the size of the teacher education in agriculture faculty.

BURKETT, Maynard S. "Perceptions of the Virginia 4-H Educational Program as Held by Superintendents, Principals, and Teachers." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The major purpose of this study was to gain a better understanding of the perceptions that Virginia school personnel held for the Virginia Polytechnic Institute and State University (VPI & SU) Extension Division's 4-H educational program.

Method. The target population of Virginia school personnel identified for this study consisted of superintendents, principals, and teachers and was restricted to include only those school divisions that had an in-school 4-H component in grades 4-7. Data were solicited via a 4-H survey mailed to a random sample of (n = 785) school personnel. Two follow-ups were used to obtain usable data from 77 percent of those surveyed. A random sample (n = 37) of non-respondents was drawn and successful telephone calls were placed to 32 of them.

Findings. (1) Differences in perceptions toward the areas of 4-H (alpha = .05).

a. Teachers held perceptions toward the 4-H curriculum which were significantly more positive than those held by superintendents.

b. Both superintendents and principals held perceptions regarding some aspects of volunteering which were significantly lower than those held by teachers. School administrators were less receptive to the idea of some in-school 4-H responsibilities being shifted from agents to volunteers than were teachers.

c. Teachers held perceptions regarding involvement with 4-H programming which were significantly lower than those held by either superintendents or principals. Teachers were reluctant to indicate a willingness to work closer with Extension agents in planning the 4-H program. A feeling of being too busy tended to prevail.

(2) Relationship between demographic variables and the areas of 4-H (alpha=.05).

In general, the demographic variables (level of formal education, tenure, age, sex, urban or rural residence, early residence, and contact with 4-H) were not strongly associated with areas of 4-H.

a. Age was negatively correlated with five areas of 4-H indicating higher perceptions by younger school personnel.

b. Level of formal education, degree, was negatively correlated with four areas of 4-H indicating more favorable perceptions by school personnel with lower degrees.

c. Tenure was negatively related to aspects of volunteering and involvement with 4-H programming indicating higher perceptions by those with less tenure. Tenure was positively related to communications for teachers indicating higher perceptions by teachers with greater tenure.

d. Rural or urban residence was negatively related to objectives of 4-H for superintendents and principals indicating higher perceptions by rural administrators. For teachers, rural or urban residence was positively related to objectives of 4-H and aspects of volunteering: indicating higher perceptions by urban teachers. For principals, rural or urban residence was negatively related to communications indicating higher perceptions by rural principals.

e. Contact with 4-H was positively related to three areas of 4-H indicating higher perceptions by principals who had had a maximum of contact with 4-H.

BURNETT, Michael F. "Tasks and Job Requirements of Skilled Technical and Managerial Agribusiness Positions." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The primary purposes of the study were: (1) to identify the tasks performed by workers in twelve selected occupations in agribusiness, and (2) to analyze three agribusiness occupations by two differing techniques (task inventory and Position Analysis Questionnaire).

Method. The occupations analyzed in the study were selected from thirty-six positions identified in the grain, feed, seed, and fertilizer and chemical areas of agribusiness. Four positions were selected at each of the three hierarchical levels: managerial, technical, and skilled. Task inventory analyses were conducted on the twelve positions included in the study.

The sample of workers participating in the study was drawn from relevant businesses within a fifty-mile radius of Columbus, Ohio. Personal interview was the principal method of data collection in the task inventory analyses.

Following completion of the task inventory analyses, three of the twelve agribusiness positions were selected for analysis using the Position Analysis Questionnaire (PAQ). The positions selected were from the feed industry and included one at each of the three hierarchical levels. The PAQ analyses were conducted with the researcher as a job analyst.

Findings. The main conclusions drawn from the findings of this study were:

(1) Task inventory analysis is more specific in identifying what a worker does than is the PAQ.

(2) Each occupation contains some job tasks at each of the levels (managerial, technical, and skilled).

(3) The Position Analysis Questionnaire is a valuable job analysis tool for identifying the types of activities associated with a job, and these types of activities are more adaptable to various occupations.

(4) The PAQ addresses the area of interpersonal relationships which is frequently neglected in task inventory analyses.

ELLIOTT, Dennis L. "The Organizational Structures, Operating Practices and Characteristics of the Members of the Boards of Directors of the Twelve Extension-Owned Resident Camps in Ohio." Master of Science Thesis, 1980, The Ohio State University, Columbus.

Purpose. The purpose of this descriptive survey study was to determine selected characteristics of the boards of directors of the twelve extension-owned resident camps in Ohio. These characteristics included: the organizational structure, operating practices, staffing procedures, salary situations, financial status, facility improvements, and a description of the members of the camp boards of directors.

Findings. Although the members of the camp boards recognized the need to increase the utilization of the camp facilities as a major challenge of the future, the boards have not, for the most part, encouraged couny agents and provided help for dynamic camp promotion and public relations activities to help increase camp enrollment.

The 4-H camp boards have not seen program planning as one of their high priority functions; consequently the bulk of the program planning has been conducted through the leadership of county agents individually in the counties.

Most 4-H camp boards have not done an effective job of redefining their responsibilities to keep pace with current trends in camping and setting goals to work toward, thus the committee structure and board representation have not been modified to match the expansion of the facilities, programming and administration of the camps.

The camp boards have utilized a wide variety of operational procedures and organizational structures to fulfill the responsibilities of providing facilities and personnel to serve the Ohio 4-H camping program. Even though some of these procedures and structures were not consistent with the principles of camp administration found in the literature, the camps have continued to improve.

HANOODY, Abdul Jaleel Yonan. "Factors Associated with Adoption of Improved Agricultural Practices Among the Sugarbeet Farmers in the Province of Nineveh, Iraq." Doctor of Philosophy Dissertation, 1979, The Ohio State University, Columbus.

Purpose. The purpose of the study was to investigate the relationship between sugarbeet farmer's degree of innovativeness with his perception of: (1) the sugar factory agent's technical competency; (2) the relevancy of the recommended practices to his own situation; (3) the expected profit to be made; and (4) the dependency on the subsidy and credit.

Method. The study was conducted in the province of Nineveh, Iraq. Data were collected from a random sample of 100 sugarbeet farmers chosen from a population of sugarbeet farmers in the province. The data for this study were collected by interviewing the respondents.

Findings. The following were the conclusions of the findings and recommendations of the study.

1. The innovativeness of sugarbeet farmers is not associated with his perception of: (a) Sugar factory agent's technical competency. (b) The relevancy of the practices to his own situation. (c) Expected profit to be made. (d) The dependency on the credit and subsidy.

2. The level of innovativeness of sugarbeet farmers in the province of Nineveh was low.

3. The extent to which the recommended sugarbeet practices were adopted by the farmers was not encouraging.

4. Only one-fourth of the farmers perceived the sugar factory agent as technically competent in his specialty.

5. Sugarbeet farmers tended to perceive the sugarbeet practices recommended by the sugar factory as relevant to their situation.

6. In general, the farmers perceived the sugarbeet crop as profitable.

7. The dependency of sugarbeet farmers on the credit and subsidy provided by the sugar factory was found to be low.

HARMON, Hobart L. "Background Characteristics, Entering Professional Competencies, and Professional Development of Postsecondary Agriculture Instructors in Ohio." Master of Science Thesis, 1980, The Ohio State University, Columbus.

Purpose. The primary purpose of the study was to provide information to those attempting to develop preservice and inservice education programs for postsecondary agriculture instructors in Ohio.

Findings. In general, most postsecondary agriculture instructors in Ohio hold the title of instructor or assistant professor; have taught in current position for five years; and have attained a master's degree. At initial employment as a postsecondary agriculture instructor, the highest percent of instructors held a master's degree; were not certified to teach vocational agriculture in Ohio; had less than one year teaching experience at the secondary level in vocational agriculture or other disciplines; had no supervised teaching experience; were employed most recently in business or industry non teaching but related to their program area; and possessed seven years of post-high school employment related to their program area, and/or two years of non related post-high school employment. On the average, instructors possessed competence in all fifty professional education competencies at time of initial employment as a postsecondary agriculture instructor, and were most competent in the area of guidance. Instructors seldom use any in-service activity to retain and/or upgrade their competency level in professional education or specialized field of agriculture. Instructors made significantly more effort to retain and/or upgrade competency level in specialized field of agriculture than professional education. Instructors used "reading occupational and professional journals/magazines" most to retain and/or upgrade competency level.

HARRISON, Fred Jr. "The Projected Role of the Cooperative Extension Service in States that Contain Both 1862 and 1890 Land-Grant Institutions as Perceived by County Extension Agents, State Specialists and Administrators." Doctor of Philosophy Dissertation, 1979, The Ohio State University, Columbus.

Purpose. The major purpose of this study was to determine the projected role of the Cooperative Extension Service in states that contain both 1862 and 1890 Land-Grant Institutions as perceived by county extension agents, state specialists and administrators. The projected role was described based on the following areas: selected characteristics of the Cooperative Extension Service; selected quality of living programs; selected social and economic development programs; selected agriculture and related industries programs; and selected clientele audiences.

Method. The target population of this study was county extension agents, state specialists and administrators in the 16 states that contain both 1862 and 1890 Land-Grant Institutions. The data for this study were collected by a mailed questionnaire.

The Statistical Package for the Social Sciences (SPSS) Computer Package was used to analyze the data for this study. The analysis consisted of measures of central tendency, frequencies, measures of association and measures of variations. Spearman-Rank Order Correlation Coefficient, the Kruskal-Wallis Test and the Kendall Coefficient of Concordance was also used.

Findings. The following were major conclusions from this study:

1. There was a high degree of agreement among agents, specialists and administrators concerning their perceptions of the Cooperative Extension Service, future program areas and clientele audiences.

2. Age, tenure, area of responsibility, highest academic degree, institution graduated and background training did not influence the perceptions of agents, specialists and administrators regarding their perceptions of the future characteristics of the Cooperative Extension Service, future program areas and clientele.

3. Males and females differed in their perceptions of the future characteristics of the Cooperative Extension Service. Males viewed the future characteristics of the Cooperative Extension Service as more closely aligned with the public land-grant university and educational programs while females saw the future characteristics as more practical and problem solving in character.

4. Agents, specialists and administrators perceived the future characteristics of the Cooperative Extension Service as being highly aligned with the following: will help people identify and understand their needs and problems and use new technology in solving them; will help people solve problems and take advantage of opportunities through education; will be educational in program content and methodology, not regulatory or financially oriented; will be administratively attached to the public university system and a major part of it rather than being attached directly to state government;

and will be practical, problem centered and situation based.

5. Agents, specialists and administrators viewed the following quality of living program items highest with reference to future emphasis to be placed on them: assisting clientele in the effective use of resources; assisting clientele in seeking out the availability of resources to provide for the needs of the individual and family; promoting the process of individual and family decision making and the skills necessary to carry them out; providing clientele with assistance in choosing among the goods and services available; and assisting individuals in the development of skills necessary to use credit wisely.

6. Agents, specialists and administrators viewed the following social and economic development program items highest with reference to future emphasis to be placed on them: assisting producers in developing skills for improving marketing decisions; assisting landowners in the understanding of soil and water conservation problems, their effects on agriculture production and the general economy; assisting producers in developing new and improved systems for marketing and processing; providing producers with updated information and research necessary for expanding markets and agricultural products; and helping landowners understand the need for long-range planning for management and use of their soil and water resources and economic alternatives available to them for developing resources.

7. Agents, specialists and administrators viewed the following agriculture and related industries program items highest with reference to future emphasis to be placed on them: providing agriculture and related industries clientele with updated research information related to controlling disease, insects, weeds, and other pests; and helping agriculture and related industries clientele obtain the most recent research results on improving harvesting, storage and marketing.

8. Agents, specialists and administrators viewed the following clientele audiences highest with reference to future emphasis to be placed on them: farm operations -- family farms; general public; organizations and institutions -- county and community organizations; farm operations -- low income farms; organizations and institutions -- educational; organizations and institutions -- farm organizations; farm operations -- other commercial family farms; rural non-farm families -- low-income; rural non-farm families -- village and towns (under 2,500 population); and urban families -- small cities (2,000 - 5,000 population).

HEILMAN, James M. "Communication Characteristics of a Beginning and an Experienced Vocational Teacher at a Residential School for the Deaf." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The purpose of this study was to describe the verbal language of a beginning and an experienced vocational teacher at a residential school for the deaf.

Method. The two teachers were selected on the basis of their teaching experience with deaf students and their ability to use manual communication. One teacher had taught seven and one-half years and was a proficient user of sign language. The other teacher was a first year employee at the school and, until this position, had no prior formal classroom teaching experience with either deaf or normally hearing students and no experience with manual communication.

Beginning the second semester of the school year, five class sessions (approximately forty minutes long) for each teacher were videotaped. These recordings were sequenced over the semester with a one-month interval between each taping. The students in the classes of both teachers were at the junior high level.

For each of the ten videotape recordings, a written transcription of the verbal language (words) used by the teacher was made. For the purposes of this study, the students' language was not transcribed.

As the tapes were transcribed, utterance boundary markers were drawn between the words to designate the segmentation of words into utterance units. Utterance units consisted of single words or groups of words that were used to convey or express complete thoughts.

Once the words were transcribed and segmented into utterance units, five types of data were collected: (1) the mode of communication used to express words (oral only, oral plus sign, sign only, oral plus fingerspelling, fingerspelling only, writing only, or oral plus writing); (2) the grammer level of each utterance unit (fragment, phrase structure, or transformation); (3) mean length of each utterance unit for each session (the total number of words used divided by the total number of utterances); (4) type-token ratio values for each tape (the total number of different words used divided by the total number of words used); and (5) the communicative intent of each utterance unit as determined by the observation System of Instructional Analysis System.

Findings. The findings of the study are as follows: (a) both teachers primarily used the oral only and oral plus sign modes; (b) both teachers primarily used transformational and fragmented language; (c) on the average, both teachers used utterances that were four words long; (d) both teachers tended to have type-token ratio values of .20; and (3) on the average, both teachers used the communicative interaction categories termed initiating, soliciting, and judging correctness.

HENDERSON, Janet L. "Sex Bias and Teacher Evaluation of State FFA Degree Applications." Master of Science Thesis, 1980, The Ohio State University, Columbus.

Purpose. The primary purpose of the research was to study an aspect of possible sex bias behavior among production agriculture teachers by analyzing their evaluation of State FFA degree applications.

Findings. The following conclusions were formulated based on the findings of the study. When evaluating State FFA degree applications, production agriculture teachers appear to be more concerned with the quality of the program of the applicant than with the particular sex of the student. The scoring guidelines established for the State FFA degree applications appear to encourage consistent ranking and objective evaluation of student performance and achievement, regardless of sex.

JAHI, Amri. "The Relationship of Selected Characteristics of Newly Hired County Extension Agents in Seven Northcentral States and Their Perceived Orientation Needs." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The objectives of the study were: (1) to describe the newly hired county Extension agents in seven Northcentral states on 12 selected characteristics; (2) to identify the two dimensions of agents' perceived orientation needs, i.e., the perceived amount of training needed and the perceived importance of 13 areas of orientation training, and to investigate the relationship of the two dimensions of agents' perceived orientation needs; (3) to investigate the relationship of the agents' characteristics and the two dimensions of agents' perceived orientation needs; and (4) to assess the relationship of the type of orientation program offered by the states in which the agents were employed and the two dimensions of agents' perceived orientation needs.

Method. The two dimemsions of agents perceived orientation needs were obtained in the literature. The perceived amount of training needed measured the agents' felt needs, and the perceived importance measured the agents' wants for training. Within these two dimemsions, 62 items of orientation training were used. The 62 training items were grouped into 13 training areas as developed by Jenkins (1975).

Findings. The results of the study indicated that: (1) the perceived training needs of newly hired agents in 13 areas of orientation training had ranged from some training needed to much training needed, and the perceived importance of the agents in the same training areas varied from some importance to important; (2) in general, agents considered that learning the position and the job descriptions, Extension program planning and development, and people's involvement in planning and implementing the Extension program to be the highest priority for orientation training; (3) there was a very strong positive agreement between the perceived amount of training needed and the perceived importance of 13 areas of orientation training of the agents; (4) regardless of the characteristics of the agents, their perceptions of orientation needs were about the same; and (5) regardless of the state in which the agents were employed, their perceptions of orientation needs were similar.

KANDEH, Joseph B. "Selected Procedures Used In Preparing Agricultural Students for Ohio Vocational Agriculture Contests." Master of Science Thesis, 1980, The Ohio State University, Columbus.

Purpose. The purpose was to provide descriptive information about differences in the procedures used to prepare winning and nonwinning teams for the Ohio Vocational Agriculture Judging Contests of 1980.

Method. Data were collected from 50 teachers (of 50 schools) representing 50 teams; 25 winners were selected by placement in contests, 25 nonwinners were randomly chosen. Chi-square and rank order correlation were used for analysis, with alpha level set at .05.

Findings. Winners and nonwinners differed significantly on the following variables: 1. Years of preparing teams, 2. Academic achievement, 3. Multiple and single teacher departments, 4. Contest experience in another organization, 5. Adequacy of materials, 6. Length of preparation period, 7. Highest contest level participation prior to 1980.

KARNS, Christine D. "Factors Influencing Secondary School Students to Enroll in Horticulture Programs in Joint Vocational Schools in Ohio." Master of Science Thesis, 1979, The Ohio State University, Columbus.

Purpose. Of the four objectives, one purpose of the study was to discover what factors influenced the decision of students to enroll in joint vocational horticulture programs. The students prior knowledge of horticulture and their views of the industry were also sought from the research. The final purpose of the study was to ascertain the career and education plans of the joint vocational horticulture students.

Findings. It could be concluded from the study that the most influential factors on enrollment were home school guidance counselors, joint vocational orientation programs, and friends. Students had limited knowledge concerning horticulture prior to their enrollment and they planned to use horticulture either as a major or secondary income or as an avocation. The students viewed the industry as traditional with occupations which had starting salaries at minimum wage and a 40 hour work week.

KITTRELL, David L. "The Relationship Among the Interest Score on Six Occupational Themes and Job Satisfaction and Performance of Ohio Cooperative Extension County Agents." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The primary purpose of this study was to determine the relationship, if any, among the six occupational interest themes of agents with one or more years of experience in the Ohio Cooperative Extension Service (OCES) and performance and job satisfaction.

The independent variables of the study were the six occupational interest themes produced by the Strong Vocational Interest Blank - Strong

Campbell Interest Inventory (SVIB-SCII). The dependent variables of the study were performance and job satisfaction. Agent performance was established by a paired comparison analysis and job satisfaction was established by the Brayfield-Rothe Job Questionnaire.

Method. County 4-H, agriculture and home economics agents with one or more years of experience (N = 230) were included in this study with usable data collected from 212. The agents responded by mail to the SVIB-SCII instrument which established six occupational theme scores and the Job Questionnaire which established the job satisfaction score. Performance data were collected from area supervisors by a paired comparison analysis.

Findings. From the readings it was indicated that agents in general should have high Social-Realistic-Investigative (SRI) or Social-Realistic-Enterprising (SRE) descriptive interest theme categories of the original six themes of social (S), realistic (R), investigative (I), conventional (C), enterprising (E), and artistic (A). In general, the agents studied produced RESCIA themes with mean scores on these themes of 53.64, 53.02, 52.67, 52.38, 48.85, and 45.14, respectively. The four higher means are extremely close and best represent the agents studied so, when comparing these findings with related literature, only the investigative theme appears to be lower than normal. The artistic theme did not appear in the related literature or this study as a high score.

Coefficients were computed in this study to determine the direction and magnitude of the relationships among all possible pairs of variables. As a result of this analysis, the following research hypotheses were supported:

1. There is a positive relationship between the social occupational interest theme and job satisfaction.

2. There is a negative relationship between the artistic occupational interest theme and performance.

3. There is a positive relationship between performance and job satisfaction.

KNIGHT, James. "Developing a Model for Recruitment, Retention, and Placement of Female Students in Vocational Education Programs Which Have Traditionally Been for Males." Staff Study, 1980, The Ohio State University, Columbus.

Purpose. To develop a model for inservice work with vocational educators and placement of female students in vocational education programs which have traditionally been for males.

Method. The study was a descriptive study using ten schools as case studies for the project. Schools were selected because of their success in recruiting, retaining and placing females in programs which have traditionally been for males. Interviews were conducted with administrators, counselors, teachers, students, parents, employers, and advisory council members.

Findings

1. When two or more non-traditional students are enrolled in a vocational program, the rate of retention is improved.
2. Teacher attitude is critical to class acceptance of students in programs non traditional for their sex.
3. Prior experience in the field is a contributing factor to female enrollment.
4. Role models are a significant factor in the success of female students in programs traditionally for males.
5. Audio-visual, instructional, and orientation materials that include representation of females useful in the recruitment, retention, and placement of female students in programs traditionally for males.
6. Support sessions give visibility to students in programs non traditional to their sex.

KOSOKO, Olatunde. "Role of the Extension Supervisor as Perceived by Selected Extension Personnel." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The primary objective of this research was to describe and compare the perceptions of state program leaders, extension supervisors, subject-matter specialists, county chairpersons, area extension agents, department chairpersons and county extension agents of the Washington Cooperative Extension with regard to the importance and extent of performance of the role of the extension supervisor in program development. A second objective of the study was to investigate the relationships between the perceptions of the role of the extension supervisor and the sex, age, position, level of formal education, subject-matter specialty, years of tenure, frequency of contact with supervisor, and job satisfaction of the respondents. Another objective was to investigate the relationship between the perceived importance of the role of the extension supervisor in program development and the perceived extent of performance of the role.

Method. A three-part questionnaire was developed and mailed to 240 potential respondents. The questionnaires were not coded, and no follow-up request was made directly by the researcher. All information supplied by respondents was treated anonymously. Fifty-seven percent of the potential respondents provided usable responses. The design of the study was descriptive correlational research.

Findings. A majority of the respondents perceived the tasks in program development as either very important or most important. It should be noted that supervisors, program leaders, department chairpersons, and specialists consistently rate the tasks slightly higher in importance than do area agents, county agents, and county chairpersons.

Generally, the relationships between perceptions of importance of program development tasks and characteristics of respondents are negligible or low. The magnitude of the relationships and their consistency among the groups of respondents are not sufficient to identify any of the demographic characteristics included in the study as factors that explain variability in the respondents' perceptions of the importance of program development tasks.

A majority of the respondents perceived that the tasks of the Extension supervisor in program development are fairly well performed. Task performance was rated on a scale including the categories of not performed, performed poorly, performed fairly well, performed well, and performed very well. However, it should be noted that county chairpersons, department chairpersons, supervisors and program leaders consistently rate performance of the tasks slightly higher than do area agents, county agents, and specialists.

Generally, the relationships between perceptions of extent of performance of program development tasks and characteristics of respondents are negligible or low. The magnitude of the relationships and their consistency among the groups of respondents are not sufficient to identify any of the demographic characteristics included in the study as factors that explain variability in the respondents' perceptions of the extent of performance of program development tasks.

Generally, the relationships between how important the role of the Extension supervisor is perceived to be and the extent to which the role is perceived to be performed are positive and moderate to strong. It should be noted however that the perceptions of area agents and department chairpersons consistently showed a higher degree of relationship while the perceptions of supervisors consistently showed a lower degree of relationship than the perceptions of county agents, county chairpersons, program leaders, and specialists.

LARKIN, Willie D. "The Leadership Skills Needed by 4-H Club Members to Become Effective Leaders as Perceived by 4-H Extension Agents." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The major purpose of the study was to determine what leadership skills 4-H club members in Georgia needed to become effective leaders. A second purpose was to determine whether or not these skills were being taught and the amount of emphasis being placed on them.

Method. The study sample consisted of one hundred seventy-two county Extension agents of the University of Georgia's Cooperative Extension Service. The sample was randomly selected from eighty counties representing the five districts in the State of Georgia. Data were collected by mail questionnaire mailed to the respondents during the month of February 1980. Completed questionnaires were received from one hundred fifty-one of the one hundred seventy-two respondents. Selection of agents was based on counties serving as the sampling unit.

A total of one hundred fourteen leadership skills were used and categorized under the appropriate headings of: (1) Management Skills; (2) Learning Skills; (3) Decision-making Skills; (4) Group Process Skills; (5) Understanding Self Skills; (6) Relationship Skills; (7) Developing Citizenship Skills; (8) Developing Communication Skills; and (9) Parliamentary

Procedure Skills. Part I of both questionnaires was designed to obtain personalogical data. Part II of Questionnaire I consisted of a Likert-type scale to answer the question of whether 4-H club youth in Georgia should be able to perform specific leadership skills. The scale used in this instrument was as follows: 1 = little importance; 2 = some importance; 3= important; 4 = high importance; 5 = essential. Part II of Questionnaire II consisted of a Likert-type scale to determine if 4-H agents in Georgia were teaching leadership skills to 4-H club members. The scale used in this instrument was as follows: 1 = very low emphasis; 2 = low emphasis; 3 = average emphasis; 4 = high emphasis; 5 = very high emphasis.

Findings. The major findings of this investigation revealed that county Extension agents perceived selected leadership skills as being needed by 4-H club members for them to become effective leaders and the agents placed high levels of importance on these skills. Also, the agents reported that they were teaching these skills and placing a high degree of emphasis on them.

For all practical purposes there were no statistically significant relationships between the perceptions of county agents on the leadership skills and their: sex; age; background training; tenure in the Extension Service; tenure in their present position; area of major work responsibility; district worked in; highest academic degree held; 4-H membership background of agents; and the tenure as a 4-H club member by agents.

Most of the leadership skills were rated above average on both the importance and emphasis scales.

LEE, Cynthia A. "Reflective Evidence from Cattle Feeders of the Buckeye Feedlot Conditioning Program on the Health Performance of Feeder Calves." Master of Science Thesis, 1980, The Ohio State University, Columbus.

Purpose. The Bovine Respiratory Disease Complex is caused by a combination of environmental stress and viral infection, followed by a secondary bacterial infection. To reduce the morbidity and mortality rates caused by the disease, a live Pasteurella hemolytica vaccine has been combined with a pre-conditioning program and called the Buckeye Feedlot Conditioning Program.

The purpose of this project was to study the health performance of pre-conditioned calves versus non-pre-conditioned calves as perceived by the feedlot operators and to help them and others grasp more fully the role and importance of the Buckeye Feedlot Conditioning Program.

Findings. Pre-conditioning of calves proved effective in reducing the incidence of sickness, treatment and death loss associated with placing calves in the feedlot. The feedlot operators had a positive evaluation of the health performance of the pre-conditioned calves. The pre-conditioned calves started on feed and responded to treatment better than non-pre-conditioned calves. The main reason why feedlot operators purchased pre-conditioned calves was to avoid health setbacks. Cattle feeders source of information on the Buckeye Feedlot Conditioning Program was through personal contact with Cooperative Extension Service personnel and being present at the auction markets.

Overall, the responding feedlot operators had a positive attitude for the future of the pre-conditioning program.

LINDEMAN, Alice K. "Nutrition Progression Record Scores of Participating Expanded Food and Nutrition Education Program (EFNEP) Families in Five Ohio Counties." Master of Science Thesis, 1979, The Ohio State University, Columbus.

Purpose. This study associated food recall and food behavior scores and the relationship between those scores with established population descriptors of EFNEP families.

Findings. Food recall scores varied more than food behavior scores with length of enrollement in EFNEP. Food behavior scores were, as a rule, higher than food recall scores during Program participation. Significant increases in food recall scores occurred most frequently after six-months participation, while most food behavior scores increased significantly after two-years enrollment. The relationship between the food recall scores and food behavior scores for the total population progressed from slight to moderate in strength after two years of EFNEP participation.

MILLER, Larry E. "Occupational Experience Requirements for Certifying as a Teacher of Agricultural Education: A National Survey." Staff Study, 1979, The Ohio State University, Columbus.

Purpose. The purpose of this study was to determine the current status of the occupational experience requirements and/or regulations needed for teacher certification in Agricultural Education.

Method. Survey methodologies were employed to gather data from the forty-eight contiguous states through mailed questionnaires. The entire population was studied. Follow-up letters were sent to nonrespondents.

Findings. Replies were received from thirty-eight (79%) states. Ten states did not require occupational experience, 4 recommended occupational experience, 7 required one year, 9 required two years, 3 required 3 years, and 5 states had varying requirement systems according to educational level. Trends noted were: (1) as formal education requirements decrease there is an increase in occupational experience requirements, (2) documentation of occupational experience is required in a majority of states, (3) teacher training institutions tended to verify the experiences, (4) 25 percent of the states required the experience after the age of 14 and 12.5 percent after 16, (5) two states noted that experience had to occur within the last 5 years and one state within 10 years, and (6) one state specified that years of experience had to be consecutive.

MULLEN, Cathy S. "Massachusetts Extension Agents' Perceptions of the 4-H Image." Master of Science Thesis, 1980, The Ohio State University, Columbus.

Purpose. The overall purpose of this study was to determine how the Extension agents in Massachusetts perceived the image of 4-H and to determine the degree of relationship between the variables--position assignment; subject matter background; county population; personal characteristics; and perceptions of the 4-H Image. The need for the study was based on the reality that the 4-H Youth Program has a rural agrarian image, when in fact, it serves a higher percentage of non-farm clientele. The image of an organization begins with those within the organization, in this case, the Extension professionals.

Method. The target population included all State 4-H staff members, County Extension Directors, and County 4-H Agents working in the thirteen counties with Extension programs in Massachusetts. A total of 70 professionals were involved in the study. Part I of the instrument was designed to gather basic data about the professionals. Part II of the instrument was designed as a semantic differential to evaluate the perceptions of the 4-H Image held by the Extension professionals. A panel of experts divided the adjective pairs into "traditional" and "progressive" descriptors of the 4-H Image.

Findings. The Extension professionals have very similar perceptions of the 4-H Image; this image tends to be very progressive. The components of the 4-H program, viewed as having the most progressive images are 4-H school programs, 4-H, teen programs and media. The professionals have very traditional images of 4-H camps and 4-H fairs. The respondents did not identify the images for 4-H volunteers, citizenship experiences, fundraising activities and career exploration as either traditional or progressive. Subject matter background, training in communication, county population, 4-H enrollment, and position assignment do not affect the image.

MULLEN, Stephen R. "Lobbying Strategies: Implications for Increasing Budget Appropriations of State Cooperative Extension Programs." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. What are the most effective methods of communicating with legislative finance committee members at the state level? This question provided the focus for studying the communication processes utilized by lobbyists in gaining the support of legislative finance committee members for organization and agency budget requests.

Method. For purposes of comparing the perceptions of different actors, in the legislative budget consideration process, sixty-one interviews were conducted with lobbyists, legislators, and administrators of the Cooperative Extension Service in the state of Ohio.

Findings. Knowledge and understanding of the methods, strategies, and techniques of communication, considered effective by legislative finance committee members and lobbyists, were perceived as being of value in analyzing the current efforts of agencies and organizations, like the Cooperative

Extension Service, who receive public funding at the state level. It was determined that such information could be utilized by administrators to make more informed decisions as to the best means to gain legislative support for future budget requests.

The findings of the study were divided into two sections. The first section focused on background data and characteristics pertaining to the experience, functions, roles, and responsibilities of respondents. In addition, subjects were asked to identify their most important sources of information on legislative affairs and budget analyses, and the essential factors for conducting effective communication efforts concerning legislative budget considerations.

In the second section of findings, respondents were asked to rate the effectiveness of fifteen communication techniques and the importance of twenty-two components concerning organizational linkages and functions performed by organization representatives. Lobbyists and legislative finance committee members were also asked to rate fourteen sources and channels of communication as to their importance in influencing legislative decisions regarding appropriation issues. In addition to the ratings, anecdotal information accompanying subjects' responses was included where appropriate.

Comparisons of the ratings of three groups, lobbyists, legislative finance committee members, and Cooperative Extension Service administrators, demonstrated that there was agreement among respondents as to the perceptions of effectiveness of various techniques. The perceptions of lobbyists and legislators were somewhat closer than those of Extension administrators. Respondents emphasized that the degree of effectiveness of a given technique was dependent upon the personal philosophies and interests of individual legislators and the image legislators possessed of a given agency or organization. Most lobbyists relied on a number of techniques which complemented an overall strategy or set of organizational policies pertaining to the methods oc communication utilized with legislative finance committee members.

PARMLEY, John D. "The Relationship of Selected Presage, Context, and Process Factors to Students' Achievement and Satisfaction in Horticulture Instruction." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The study was designed to determine the relationship of selected presage variables (teacher characteristics), context variables (school and community characteristics) and process variables (activities of classroom teaching) to students' achievement and satisfaction from horticulture instruction.

Method. The target population of this study was the vocational horticulture classes in Ohio. The accessible population was junior vocational horticulture classes in Ohio taught by teachers who were not cooperating teachers during the autumn quarter 1979 in the student teaching program of the Department of Agricultural Education at The Ohio State University. The population was stratified on the presage variable type of preparation for teaching into four-year provisionally certified teachers, one-year vocationally certified

80

teachers with a degree and one-year vocationally certified teachers without a degree. An additional criterion for selection of classes to be included in the study was that the school administer the Ohio Horticulture Achievement Test during April 1980. Nineteen junior horticulture classes (each having one teacher) located in 18 schools with a total of 252 horticulture students participated in the study.

The Ohio Horticulture Achievement Test was used to measure the dependent variable student achievement. The dependent variable student satisfaction was measured by the Student Satisfaction Index. Independent variables were quantified by teacher responses to the Horticulture Teacher Survey, Horticulture Greenhouse Crop Survey, Horticulture Equipment Survey, and Attendance Record. In addition, students' responses to the Student Information Sheet, The California Short Form Test of Academic Aptitude, The Clear Teacher Checklist, and The Enthusiastic Teacher Checklist provided measures of other independent variables.

The investigator visited each school and gathered teachers' and students' responses to the various instruments. The achievement data were obtained from The Ohio State University Trade and Industrial Education Instructional Materials Laboratory.

Findings. An analysis of the data revealed the following significant relationships between presage variables and students' achievement and satisfaction from horticulture instruction: (1) a moderate negative relationship between years of occupational experience accumulated by teachers and student achievement and (2) a moderate negative relationship between years of teaching and student satisfaction.

The data also revealed the following significant relationships between context variables and students' achievement and satisfaction from horticulture instruction: (1) a low positive association between students planning further education in horticulture and student achievement, (2) a low negative association between students planning further education in an occupation other than horticulture and students' satisfaction, (3) a low positive relationship between months of paid experience in horticulture before enrollment and students' achievement, (4) a low positive relationship between months of paid experience after enrollment and students' achievement, (5) low negative associations between number of days absent and students' achievement and satisfaction, (6) a low positive association between students admitted to horticulture as first choice and students' achievement and satisfaction, (7) a substantial positive relationship between students' academic aptitude and students' achievement, (8) a low positive association between students' academic aptitude and students' satisfaction, (9) a low positive association between students' socioeconomic background and students' achievement, (10) low positive relationships between students' home educational atmosphere and students' achievement and satisfaction, (11) a moderate positive association between class size and student satisfaction.

Finally the data revealed the following significant relationships between process variables and students' achievement and satisfaction from horticulture instruction: (1) a very strong, positive association between teacher clarity and student satisfaction and (2) a substantial positive association between teacher enthusiasm and student satisfaction.

PARMLEY, John and NEWCOMB, L.H. "The State of the Art in Vocational Teacher Education." Staff Study, 1980, The Ohio State University, Columbus.

Purpose. The study was designed to describe the following features of undergraduate vocational teacher education programs:

1. emphasis on selected teaching and management skills
2. early field experience
3. student teaching
4. technical course requirements
5. nature of the methods course(s)

Method. Teacher educators in agricultural education, distributive education, home economics education, and business education recommended schools which had a reputation for conducting a quality undergraduate teacher preparation program. Survey instruments were mailed to the head teacher educator at each school. Responses were received from 100 percent (n-15) of the agricultural education teacher educators, 67 percent (n=10) of the distributive education teacher educators, 60 percent (n=9) of the home economics teacher educators, and 13 percent (n=2) of the business and office education teacher educators. Because of the small return from business and office education, their findings are not reported.

Findings. Each of the three service areas tended to indicate that they placed emphasis on similar teaching and management skills. There were some exceptions. In agricultural education, more emphasis was placed on the use of demonstrations, field trips, developing and using a filing system, and organizing and advising a vocational youth organization. In distributive education there was more emphasis placed on role playing, organizing and using advisory committees, evaluating students and programs, and making and analyzing annual reports. In home economics education, more emphasis was placed on using principles of learning and teaching and on organizing a multiple teacher department.

Ninety-four percent of the respondents indicated their students participated in early experience programs, usually in the sophomore and junior years. The majority of these programs (80%) were from one to ten days in length and 81 percent of the respondents indicated that the amount of credit provided for this experience was either zero or one to two credit hours of credit. Sixty-six percent of the respondents indicate that early field experience students are assigned at the rate of one student per teacher. Seventy-three percent of the respondents do not supervise students during early field experience.

In order to do student teaching, a certain grade point average is required by many institutions; however, there are some that require no minimum grade point average. The mean grade point average required is 2.21 and goes as high as 2.75. The great majority of student teaching takes place during the senior year (97 percent) and ranges from six to eleven weeks in length lasting full days. A mean of 8.09 semester credit hours is awarded for student teaching. Sixty-eight percent of the respondents indicated they give letter grades for this credit. Eighty-five percent of the respondents reported that they provide one to four supervisory visits during student teaching.

The number of semester hours of technical course work required for certification ranged from 12 to 61 semester hours, with a mean of 35.7 semester hours. Ninety-one percent of the respondents do not award technical credit for prior work experience; fifty-eight percent do require previous work experience before graduation and certification; and seventy-five percent of the respondents indicate that there is an opportunity for students to acquire this experience as a part of the undergraduate program. The number of clock hours of occupational experience required ranged from no requirement to 4,000 hours, with a mean of 1,800.35 clock hours of required occupational experience.

All of the respondents indicate that their methods course includes the following topics: student discipline, basic methods of teaching, lesson planning, problem solving, and the teaching and learning process. In addition. all of the distributive education respondents include test construction and evaluating instructors in their methods course, and all the home economics respondents include public relations, vocational student organizations, and managing laboratories.

PETERS, Jerry L. "The Effects of Laboratory Teaching Experience (Microteaching and Reflective Teaching) in an Introductory Teacher Education Course on Students' Views of Themselves as Teachers and Their Perceptions of Teaching." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The major purpose of the study was to compare the effects of two forms of laboratory teaching experience in an introductory teacher education course on students' views of themselves as teachers and their attitudes toward and perceptions of teaching. The study was designed to test the following hypothesis:

> There will be no difference between the scores of teacher education students participating in reflective teaching and teacher education students engaging in microteaching on posttests which measure students:
>
> 1. views of themselves as teachers
> 2. attitudes toward teaching
> 3. perceptions of the role of teaching
> 4. attitudes toward the type of laboratory teaching experience engaged in (microteaching or reflective teaching).

Method. Intact groups of students enrolled in the course Introduction to Agricultural Education (Agricultural Education 200) at The Ohio State University were randomly assigned to the two levels of the independent variable, laboratory teaching experience. A non-equivalent control group design was used for the experiment during Autumn Quarter, 1979 and again for the replication of the study during the Winter Quarter, 1980. The two groups received identical course material except for the differences in the two laboratory teaching experiences.

One level of the independent variable was reflective teaching. Reflective teaching is a form of on-campus laboratory teaching experience whereby several teachers vie to accomplish the same objective with different groups of their peers. The second level of the independent variable was microteaching. Microteaching is another form of on-campus laboratory teaching experience whereby students practice teaching a "technical skill" (i.e., set induction) with a small group of their peers.

The major dependent variables were scores on the posttests. Three of the four variables -- students' views of themselves as teachers, students' attitudes toward teaching, and students' perception of the role of teaching -- were measured both as pretests and posttests. The fourth variable, students' attitudes toward their laboratory teaching experience, was measured only during the posttest. Attitude scales were used to measure the dependent variables.

Findings. The findings revealed that for all dependent variables there were no statistically significant differences in the posttest scores of the students receiving reflective teaching and those students receiving microteaching either quarter. However, additional data revealed that for both Autumn Quarter, 1979 and Winter Quarter, 1980 subjects in the reflective teaching groups reported a significantly higher degree of satisfaction with their teaching performance when compared with subjects in the microteaching groups. Subjects in the reflective teaching groups also reported a higher level of learner satisfaction than subjects in the microteaching groups. This difference was significant for the Winter Quarter, 1980 only. Analysis of data collected on reflective teaching subjects revealed that the majority of the designated teachers had all of their learners achieve the objectives of the lessons they taught. Analysis of data collected on microteaching subjects' teaching performances revealed the majority of teachers were rated as either fair or good by the college instructor.

PICKARD, Ross D. "Should The Ohio State University Offer An Undergraduate FFA Course?" Master of Science Thesis, 1979, The Ohio State University, Columbus.

Purpose. The major purpose of this study was to determine whether The Ohio State University should offer an undergraduate FFA course to those majoring in agricultural education. In addition, information was sought concerning whether or not it should be a required course. Principal conclusions drawn were as follows.

Findings. Those people with a greater amount of FFA experience perceive a greater need for additional FFA instruction than do those with less FFA experience. Additional classroom instruction in FFA is perceived as the best method of obtaining FFA experience at The Ohio State University. Graduates and undergraduates are supportive of an undergraduate FFA course that would be required. The Ohio State University should offer an undergraduate FFA course.

84

POOLE, Arnold T. "Role of the District Program Leader in the Virginia Cooperative Extension Service as Perceived by Selected Extension Personnel." Doctor of Philosophy Dissertation, 1979, The Ohio State University, Columbus.

Purpose. This study was undertaken to identify, examine, and describe the role of District Program Leader, as perceived by Administrators and Directors, Specialists, District Agents, District Program Leaders, and Extension Agents in the Virginia Cooperative Extension Service. Objectives of the study were:

1. To describe and compare the perceptions of the following groups concerning the importance and performance of the role of the District Program Leader:

   a. Administrators and Directors
   b. Specialists
   c. District Agents
   d. District Program Leaders
   e. Extension Agents (Area)
   f. Extension Agents (Unit)

2. To investigate the relationships between perceived role of District Program Leader and the following characteristics of the respondents:

   a. Tenure with the organization
   b. Age
   c. Area of responsibility
   d. Level of formal education
   e. Frequency of contact with district program leaders
   f. Type of contact with district program leaders

3. To investigate the relationship between perceived importance and performance of the tasks in the role of District Program Leader.

Findings. Major findings of the study were:

1. In general, a high degree of relationship existed between the personal characteristics of respondents and their perception of the role of District Program Leader.

2. There was diversity of opinion between position groups in perception on forty-nine of the eighty-four tasks ranked for importance and on forty-seven of the eighty-four tasks ranked for performance.

3. There was no significant relationship between the perceptions of personnel regarding importance and performance of tasks in the role of District Program Leader.

RAMSINI, William. "Role of the County Extension Advisory Committees as Perceived by Selected Extension Groups." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The study was designed to: (1) determine and compare the importance and performance of the role of County Extension Advisory Committees in Ohio as perceived by County Extension Advisory Committee members, County Extension Agents, Chairpersons and Area Supervisors; (2) identify the background characteristics of the respondents; (3) identify the relationship between the perceived role of County Extension Advisory Committees and the following background characteristics of the respondents:

A. Committee members
   1. Length of association with Extension
   2. Level of formal education
   3. Sex
   4. Occupation
   5. Position (Officer-member)

B. County Extension Agents, Chairpersons and Area Supervisors
   1. Tenure with Ohio Extension Service
   2. Level of formal education
   3. Years employed in the present position
   4. Age
   5. Sex

Method. Data were collected by mailed questionnaire from 199 of 338 persons randomly selected from three groups, County Extension Advisory Committee members, County Extension Agents, Chairpersons and Area Supervisors. The questionnaire consisted of two parts. Part I of the instrument gathered information about the tasks of the County Extension Advisory Committee to which the respondents were to respond in terms of (a) their importance to the role of the County Extension Advisory Committee member. Part II identified relevant background information of the respondents.

Findings. The following were the conclusions of the study.

1. In general, County Extension Advisory Committee members, County Extension Agents, Chairpersons and Area Supervisors have very similar perceptions of the importance and performance of the functions of the County Extension Advisory Committee.

2. County Extension Advisory Committee members scores on a scale representing the level of importance of their functions were higher than their scores on a scale representing the level of performance of these functions.

3. County Extension Agents, Chairpersons scores on a scale representing the level of importance of their functions were higher than their scores on a scale representing the level of performance of their functions.

4. Area Supervisors scores on a scale representing the level of importance of their functions were higher than their scores on a scale representing the level of performance of these functions.

5. County Extension Agents, Chairpersons with higher tenure perceive a higher level of performance of the program evaluation tasks of the Advisory Committee than lower tenured Chairpersons.

6. Area Supervisors with higher tenure perceive a lower level of importance of the program implementation tasks than those with lower tenure.

7. Advisory Committee members in different occupational groups have different perceptions of the importance of the program implementation tasks of the Advisory Committee.

8. Advisory Committee members in different occupational groups have different perceptions of the performance of the program evaluation tasks of the Advisory Committee.

9. Male Committee members rated the importance of the program evaluation tasks higher than female members.

10. County Extension Agents, Chairpersons at different educational levels have different perceptions of the program determination tasks of the Advisory Committee.

11. Area Supervisors at different educational levels have different perceptions of the program evaluation tasks of the Advisory Committee.

RIES, Ann E. "Relationship of Perceived Sex Bias and the Decision of Women to Teach Production Agriculture." Master of Science Thesis, 1980, The Ohio State University, Columbus.

Purpose. The purpose of the study was to measure the significance of the perception of sex bias as it relates to the low participation of women in the agricultural teaching field. Three levels of the educational continuum were investigated: female students enrolled in vocational agriculture at the secondary level, female students enrolled in agricultural education at the post-secondary level and female teachers of production agriculture.

Findings. A significant relationship was found between the perception of sex bias among female students and their desire to teach production agriculture. It was also concluded that the job satisfaction of female teachers of production agriculture is influenced by their perception of sex bias among parents and employers of students.

ROMIG, Robert L. "Competencies Required of Mid-Management Personnel in Ohio Wood-Using Industries Dissertation." Doctor of Philosophy Dissertation, 1979, The Ohio State University, Columbus.

Purpose. The basic purpose of this study was to identify the competency needs for mid-management positions and related information as perceived by the following groups of people involved in Ohio wood-using industries. 1) Personnel working at the managerial level in manufacturing establishments, 2) Graduates of the Wood Utilization program at The Agricultural Technical Institute.

Method. One target population of this study was managers in manufacturing establishments in Ohio that use wood as a raw material. The second target population included all of the graduates of the Wood Utilization Program from the Agricultural Technical Institute in Wooster, Ohio. A 50 percent random sample of manufacturing establishments, and all of the graduates from the Institute were used in this study. Data were collected from respondent managers and graduates by a mail questionnaire.

Findings. The following were conclusions selected from this study:

1. Managers rated mechanical tasks (i.e. Correct potential equipment safety hazards) as the most important group of competencies for entry into mid-management positions in Ohio wood-using industries.

2. Managers rated administrative tasks (i.e. Identify ways to eliminate inefficient use of labor) as the most important group of competencies for advancement in mid-management positions in Ohio wood-using industries.

3. Graduates rated administrative tasks (i.e. Take physical inventory) as the most important group of competencies for both entry and advancement into mid-management positions in Ohio wood-using industries.

4. There was very strong agreement between managers' and graduates' ranking of technical tasks for entry into mid-management positions.

5. There was substantial agreement between managers' and graduates' ranking of technical competencies for advancement in mid-management positions.

6. There was moderate agreement between managers' and graduates' ranking of administrative tasks for entry into mid-management positions.

7. There was substantial agreement between managers' and graduates' ranking of administrative tasks for advancement in mid-mangement positions.

8. There was very strong agreement between managers' and graduates' ranking of mechanical tasks for entry into mid-management positions.

9. There was substantial agreement between managers' and graduates' ranking of mechanical tasks for advancement in mid-management positions.

10. There was a moderate association between managers' years in position and years in the industry and the way they ranked entry level duty areas. There was low association between managers' years in position and years in the industry and the way they ranked advancement duty areas.

11. There was substantial association between managers' level of education and the way they ranked entry level duty areas. There was moderate association between managers' level of education and the way they ranked advancement duty areas.

12. There was a very strong significant association between managers' size of company and the way they ranked entry duty areas. There was moderate association between size of company and the way managers' ranked advancement duty areas.

ROSS, Sandra K. "Some Factors Influencing Tenure of Managerial Employees in the Fast Food Restaurant Industry." Master of Science Thesis, 1979, The Ohio State University, Columbus.

Purpose. The purpose of this study was to examine characteristics associated with turnover and to study associations and relationships between items reported in the personnel files and length of service of short and long-tenured managers in the fast food restaurant industry.

Findings. The principal conclusion for this study was that certain items contained in the personnel files of the terminated managers do have association with tenure. Also a relationship does exist between items in the personnel files and tenure for all managers and the short and long-tenured groups.

SCANLON, Dennis C. "The Effects of Task Instruction Sheets On the Performance of Eleventh Grade Students Studying Vocational Horticulture." Doctor of Philosophy Dissertation, 1979, The Ohio State University, Columbus.

Purpose. The major objective of this study was to investigate the effects of introducing task instruction sheets to the horticulture laboratory setting.

Method. A true experimental design was used to test the major hypotheses of the study. The active independent variable was the method of instruction used. There were two levels of the independent variable: 1) instruction using the series of task instruction sheets, *Poinsettia Production*, and 2) instruction in a unit on poinsettia production without the aid of task instruction sheets.

In addition to the independent variable, the attribute variable reading ability was measured and used as a covariate in the design.

Teachers in participating schools were visited twice from September to December 1978. During these visits a standardized version of the Gates-MacGinitie reading test was administered. Posttests were administered by the teachers as end-of-unit mastery tests and the results were mailed back to the investigator. At the conclusion of the experiment, each teacher was visited and requested to fill out a two-part questionnaire. This was designed to monitor the independent variable by collecting data on what instructional techniques were used by teachers and specifically what use they made of the task instruction sheets.

Findings. The major findings of the study were as follows.

The mean scores of the experimental and control groups differed significantly at the .05 level. A Pearson product moment correlation coeffecient was calculated to determine the relationship between a student's reading ability and his or her posttest score. The data showed a positive correlation of .47. However, a correlation coefficient of .47 was not sufficient to reject the null hypothesis at an alpha level of .05. Thus the researcher concluded that there was no relationship between reading aptitude and posttest scores. No significant interaction between reading scores and treatments was found.

SCHENEMAN, Carl S. "The Role of the 4-H Youth Program of The Ohio Cooperative Extension Service in Citizenship Education." Doctor of Philosophy Dissertation, 1979, The Ohio State University, Columbus.

Purpose. A research study was conducted to determine the role of a youth-service organization, the 4-H Youth Program of the Ohio Cooperative Extension Service, in citizenship education. The role of the Ohio 4-H Youth Program was based on an analysis of citizenship-related 4-H projects and activities that were conducted during fiscal year 1979. The existence of a 4-H citizenship education program was inferred from an analysis of these projects and activities.

Method. The population consisted of 120 faculty members of the Ohio Cooperative Extension Service. The data collection methods used were: (1) questionnaire mailed to county and area 4-H agents and the "state 4-H citizenship coordinator" and (2) personal interviews with department chairpersons and assistant directors. Ninety-two percent of the faculty members who were mailed questionnaires responded, while 100 percent of the faculty members who were contacted for an interview responded. Both instruments were administered during September and October, 1979.

Findings. Following are the major conclusions based on the findings of this study.

1. Faculty members generally conceive a democratic citizen to be a participator: a person, regardless of age, who responsibly participates in the decision-making processes of groups to which he or she belongs.

2. Although the degree of association is low, faculty members who have attended educational programs of the National 4-H Center tend toward a participator role conception of a democratic citizen than did those who have not attended such programs.

3. The skills and attitudes domains of learning are emphasized more than the knowledge domain.

4. The content area that is predominantly emphasized is group dynamics and leadership. The least emphasized content areas are law, international relations, and elections/political parties.

5. The most prevalent citizenship-related projects and activities are: leadership training sessions, 4-H club governance, U.S. flag etiquette, leadership development projects, community improvement projects, and service on boards, commissions and committees with adults.

6. The predominant level of evidence utilized to evaluate the 4-H citizenship education program is the number of 4-H members and junior leaders involved in projects and activities. The least utilized level is behavioral change in 4-H members and junior leaders.

7. The most used forms of recognition utilized to acknowledge the citizenship achievements of 4-H members, junior leaders or 4-H clubs/groups are: publicity, awards, and verbal praise.

8. Citizenship-related awards predominantly recognize 4-H members and junior leaders for their individual achievements.

9. The most frequently used resource persons are government officials, business persons, legislators, school personnel, and civic organization leaders. Resource persons predominantly serve as speakers at citizenship-related activities.

10. Existing resources within the College of Agriculture and Home Economics could be utilized to strengthen 4-H citizenship education progamming i.e., future research and evaluations studies and development of educational materials.

STARLING, John T. "Farm Business Analysis Report of Programs Conducted by Teachers of Vocational Agriculture." Staff Study, 1980, The Ohio State University, Columbus.

Purpose. The purpose of this study was to provide farm business analysis teachers as well as teachers of agricultural production courses with some averages; relative to certain efficiency factors, which they can use in teaching classes in agricultural production to make them more realistic.

Method. Ohio Teachers who were conducting Farm Business Planning and Analysis programs submitted 422 farm business summaries for computer analysis. Averages of several selected measures of performance from the farm business analyses were used to secure the data for this study.

Findings. Some of the major findings of this study were: 1) The average capital investment per farm was $323,388., an increase of $70,371 over the previous year. Much of this increase was accounted for by an increased investment in land of $40,983 per farm. 2) Gross income per farm increased $15,498 while the increase in net farm income was only $900. This small increase in net farm income was due to increased production costs. 3) In general dairy farmers realized high profits in 1979 due largely to adequate milk prices. 4) An analysis of the data shows that 1979 was not a profitable year for swine farmers. Low prices during much of the year was the contributing factor. 5) High production costs and low grain prices made it difficult for many crop farmers to realize a profit in 1979. The cost of fertilizer per acre increased 12 percent over 1978. 6) A close analysis of the data indicates that the debt structure in agriculture may not be on a sound basis and farmers need to be involved in a good system of financial management.

WATKINS, James E. "A Follow-Up Study of Former Graduate Research Associates of the National Center for Research in Vocational Education." Doctor of Philosophy Dissertation, 1980, The Ohio State University, Columbus.

Purpose. The purpose of this study was to determine whether working as a graduate research associate at the National Center for Research in Vocational Education provided the kinds of experiences that were used in subsequent leadership roles in vocational education.

Method. This study was delimited to former graduate research associates employed during the years of 1965-78 who had completed a minimum of three quarters carrying a 50 percent work load at the National Center for Research in Vocational Education and a full-time course load at The Ohio State University. A total of 199 individuals were identified as the population for the study.

Data were collected by mail questionnaire. The data in the study was obtained from 84 percent of the accessible population. Data were analyzed and reported by the use of descriptive statistics.

Findings. Important conclusions drawn from this follow-up study of former graduate research associates were:

1. The more graduate research associates performed activities at the National Center, the more they performed them in subsequent jobs. In each of the five categories of activities, there was a positive association with activities performed during the graduate research associateship and in subsequent jobs.

2. The performance of the activities in each of the five activity categories prior to the graduate research associateship also had positive associations with activities performed in subsequent jobs.

3. All of the activities performed as graduate research associates were performed in subsequent jobs.

4. Research and development activities were being performed in jobs subsequent to the graduate research associateship to a greater extent by respondents whose major field of study at The Ohio State University was in vocational education and vocational education service areas.

5. Former graduate research associates found employment in twenty fields. The greatest number reported they were employed in vocational education or vocational education service areas.

6. There was an increase in the number of respondents now employed in vocational education and vocational education service areas over those employed in vocational education prior to the graduate research associateship.

7. Seventy-seven percent of the former graduate research associates who were not enrolled in vocational education and vocational education service area graduate programs became involved in vocational education in their subsequent careers.

8. The respondents indicated that the National Center aided them in seeking and finding jobs.

9. The former graduate research associates were mobile. Two-thirds moved to states for subsequent employment other than the states of previous employment.

10. Males and females reported that the experience as a graduate research associate was similar.

11. Activities that were performed more in subsequent jobs were also performed more during the graduate research associateship.

12. Former graduate research associates with vocational education backgrounds perceived that the experience at the National Center was more beneficial than did those from other backgrounds.

OKLAHOMA

AGHAZADEH-ATTARI, Ali-Mirza. "Perceptions of Iranian Agriculture Extension Workers as to Their Adequacy in Providing Instruction in the Area of Animal Science." Doctor of Education Dissertation, 1980, Oklahoma State University, Stillwater.

Purpose. The fundamental purpose of the study was to identify, describe, and analyze findings regarding various selected aspects of the judgements of extension workers and extension corps members in furthering livestock production in a province of northwestern Iran.

Method. Twenty-two extension corps members and 18 extension workers were interviewed by a former extension corps member who was engaged in study in the United States. The structured interview form was designed to elicit judgements from respondents regarding (1) farmers use of selected categories of opinion leaders, (2) identification of possible limitations to the further development of the livestock industry, and (3) self-assessment of present knowledge held and skills possessed contrasted with knowledge needed and skills which should be attained. An exhaustive study of the livestock industry in Iran was also made as an integral part of the study.

Findings. Among the group of five selected task role categories provided, the village headman was identified as the role person whose advice and counsel was most frequently sought. This identified role was closely followed by that of the outstanding farmer.

BEN DHIFALLAH, Mokhtar. "A Comparison of Judgements Made By Managers of State Farms (Agro-Combinats) and of Agricultural Cooperatives (U.C.P.) in Tunisia Regarding Skills and Training Needed." Master of Science Thesis, 1980, Oklahoma State University, Stillwater.

Purpose. The major purpose of the study was to identify and describe certain perceptions presently held by two groups of farm managers in Tunisia, managers of (1) State Farms and (2) of Agricultural Cooperatives.

Method. A twenty statement questionnaire, administered to 20 percent of the population of managers in each group was designed to measure relative strength of concurrence of perceptions in five areas: (1) level of education most desirable for developing into a good manager, (2) experience and background desirable for becoming a good manager, (3) components and kinds of training most desirable, (4) motivation and behavior most suitable for carrying out management functions and (5) training needed. A Likert type scale was used to categorize strengths of responses.

Findings. In terms of training needed it is evident that managers of state farms, themselves having attained a higher level of preparatory training, are not quite as strongly in favor of the in-service training as are their counterparts, managers of agricultural cooperatives. Both groups perceive extensive preparation in the form of securing management skills as being desirable.

CASTLE, Elmo M. "Occupational Decisions Made by Garber State Farmers From 1931 Through 1980 and Selected Information Related to Those Decisions." Master of Science Report, 1980, Oklahoma State University, Stillwater.

Purpose. To determine location, occupation, and education of the Garber State Farmer Degree holders and the perceived benefits of the degree.

Method. Every State Farmer from the Garber FFA Chapter was surveyed by questionnaire.

Findings. Every one of the respondents stated that students in vocational agriculture should seek the degree. A high percentage (91 percent) said students should seek the degree even though their interests might not be in farming. Justification was also made when 68 percent revealed that the degree proved beneficial in the occupation they are in today. It was further concluded that after compiling the list of occupational decisions made by the 110 State Farmers, they have continued to excel in their education pursuits and have felt that more education was an important factor for any type of advancement.

CHOUDHURY, A.K.M. Ferdous. "An Assessment of an International Voluntary Services Project as a Potential Model for Agriculture and Rural Community Development in Bangladesh." Doctor of Education Dissertation, 1980, Oklahoma State University, Stillwater.

Purpose. The fundamental purpose of this study was to accomplish an appraisal of the International Voluntary Services (IVS) project directed toward agriculture and rural community development and presently operating in selected villages in the District of Sylhet, Bangladesh.

Method. Data were collected both from primary and secondary sources through an extensive review of literature, and a sample survey conducted within the project area. Responses were secured from five selected categories of respondents: (a) fifty farmers, (b) twenty local extension trainees, (c) six local extension personnel, (d) nine expatriate and eleven native IVS workers, and (e) nine administrative and supervisory officials involved in the IVS project.

Findings. Primary data responses secured from the selected categories of respondents reveal that farmers of the project area are adequately responsive to external sources of help for improvement of agriculture and rural conditions. Farmers were reported to be highly interested in, and responsive to development programs of the IVS project. A good majority of farmers were reportedly very much interested in achieving a better quality of life through increased education, increased food production, improved diet habits, and increased family planning measures.

COCKRUM, Raymond. "Vocational Agriculture Teachers' Perceptions of Agri-Business Supervised Experience Programs in Oklahoma." Master of Science Report, 1980, Oklahoma State University, Stillwater.

Purpose. This study was conducted in order to determine the nature of agribusiness supervised occupational experience programs in 66 selected Oklahoma vocational agriculture departments and the attitudes of those teachers toward selected aspects of agribusiness programs.

Method. All teachers from one Professional Improvement Group in four of the Supervisory Districts of Oklahoma were surveyed with a questionnaire.

Findings. Analysis indicated that most Oklahoma vocational students are carrying only production-oriented supervised occupational experience programs; vocational agriculture students entering into agribusiness programs will also be involved in production-oriented programs; the training of agribusiness students for employment is becoming the responsibility of the vocational agriculture teacher; there is a need for more emphasis to be placed on agribusinesses within vocational agriculture programs; job availability is greater in areas of agribusiness as compared to production areas; and supervised experience programs in agribusiness provide an appropriate means of expanding the traditional vocational agriculture programs in Oklahoma.

COSNER, Barney L. "Perceptions of Oklahoma Residents Toward the Cooperative Extension Function of the Oklahoma State University Division of Agriculture." Doctor of Education Dissertation, 1980, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to determine the awareness of the Cooperative Extension function of the Oklahoma State University Division of Agriculture by a stratified random sample of the general public residing in Oklahoma.

Method. The telephone survey-interview technique was used to gather data from 2,401 residents of Oklahoma who were 18 years or older, having access to a telephone, and having their number listed in a published telephone directory in Oklahoma. The format of the 35-item instrument included 12 questions relating to the Cooperative Extension Service. The statistical procedure used included frequency distributions and Chi-square analysis.

Findings. Responses by the Oklahoma residents in this study indicated that over 78.0 percent were aware of having an Extension office in their county. Slightly over 47.0 percent of the respondents or their family had been involved with the 4-H program, while the largest percentage of respondents had heard of or had contact with the agricultural agent or home economist in their county. Almost 37.0 percent had contacted their Extension office for information and over one-half of these respondents had "called" for information.

DARCEY, Chester L. "Follow-Up of Mechanized Agriculture Graduates at Texas A & M University." Doctor of Education Dissertation, 1980, Oklahoma State University, Stillwater.

Purpose. This study involved a follow-up study of graduates of the Mechanized Agriculture Curriculum at Texas A & M University.

Method. The study was done using mailed questionnaires as the data gathering method. These questionnaires were sent to all graduates, and their employers if applicable, who majored in Mechanized Agriculture during the initial seven year period of the program.

Findings. Analysis indicated that former students and their employers perceive the 10 skill areas in much the same manner. The self-employed categories of former students placed more emphasis on the mechanical skills, while those former students employed by others felt the skills dealing with communication, personnel relations, and supervisory and management were more important. Respondents felt that they were well prepared by the Mechanized Agriculture Curriculum to meet their job requirements.

HOLLEY, Calvin W. III. "Perceptions of Oklahoma Residents Toward the Experiment Station Function of the Oklahoma State University Division of Agriculture." Doctor of Education Dissertation, 1980, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to determine a base-line perceptional awareness by the Oklahoma public of the Agricultural Experiment Station in the Division of Agriculture at Oklahoma State University and compare that perceived awareness among groups comprising different incomes, job classifications, ages, racial/ethnic backgrounds, sex categories, and education.

Method. A telephone-survey questionnaire was developed and used to gather data for the research effort. The instrument was designed to determine the level of awareness of the respondents toward the experiment station and to obtain certain demographic data from each respondent.

Findings. Residents with high awareness were white males between the ages of 35 to 49 who were college trained and had higher than median incomes. They were also involved in agriculture or agricultural related occupations. Individuals with high awareness used personal observation to secure information concerning research at Oklahoma State University and felt that food prices would be higher had we not had agricultural research. They also felt that Oklahomans had a large amount of input in determining research efforts at Oklahoma State University.

JACKSON, Patrick Ransford. "The Current Status of Activities of the Sierra Leone Extension Service and Recommendations for Future Improvement." Master of Science Report, 1980, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to determine the current status of activities of the Sierra Leone extension service and to suggest some specific recommendations for future improvement.

Method. A questionnaire was developed and mailed to two groups. The first was Sierra Leonean students attending American universities and students at Njala College in Sierra Leone. The second group was extension professionals working at the Sierra Leone extension service in Freetown and some of the faculty members at Njala College.

Findings. Based on data collected, certain conclusions were made. The extension service in Sierra Leone needs some changes in the present organization, business procedures, personnel or local leaders, who determine the needs of the farmers.

JOHNSON, Albert Byron Jr. "A Follow-Up Study of 1973-74 Oklahoma Vocational Agriculture Completers." Doctor of Education Dissertation, 1980, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to ascertain the occupational status, demographic data, and opinions about their vocational agriculture program from 385 identified 1973-74 completers of secondary vocational agriculture programs in Oklahoma.

Method. A survey instrument with modifications for Oklahoma was mailed to the former students. The instrument provided an opportunity for the sample to report the required data and rate statements about their vocational agriculture program.

Findings. The vocational agriculture program was indicated by 93.9% to be useful to community farmers. It was agreed upon by 96.2% of the respondents that laboratory instruction should be included in the instructional program of vocational agriculture. Full-time farmers and college students responded significantly more positive at the .05 level than non-agricultural employees and unemployed persons to the statement that experiences in vocational agriculture helped them to choose an occupation.

MEEKS, Larry A. "Fund-Raising Methods and Expenditures in the Twenty-one Future Farmers of America Chapters of the Tulsa Area Professional Improvement Group." Master of Science Report, 1980, Oklahoma State University, Stillwater.

Purpose. The study was intended to help chapters in the Tulsa Area P.I. Group find methods of raising funds that are both appropriate and profitable to the members of the FFA chapters. Second, it examined the various means by which chapters in the Tulsa Area P.I. Group expend those monies in order to determine which ones are suitable and worthwhile and which are unnecessary or unwise.

Method. The material for this study was collected from personal interviews and questionnaires that were sent to the twenty-one FFA chapters in the Tulsa Area P.I. Group.

Findings. Information in this study revealed that sausage sales, slave sales, and FFA dues were most common ways to raise funds for the chapters. Expenses have increased sharply from past studies, therefore placing more pressure on advisers to select activities which are educational and worthwhile. There seemed to be no relationship between chapter size and chapter income and expense.

RAOUFI, Bahram. "The Training Needs of Extension Workers Related to Mechanized Agriculture in Iran." Doctor of Education Dissertation, 1980, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to identify and analyze the training needs of extension workers as related to mechanized agriculture in Iran.

Method. A questionnaire utilizing a five-point response scale was developed to determine extension workers' needs in five different areas of mechanized agriculture: Agriculture Shop Work; Agricultural Power and Machinery; Agricultural Buildings and Conveniences; Farm Electrification; and Soil and Water Management.

Findings. It was found that the respondents felt that establishing farm shops and extension stations at the township (Dehistan) level was "much" important. It was concluded that agricultural extension workers in Iran need "much" training in Agricultural Shop Work, Agricultural Power and Machinery, Agricultural Buildings and Conveniences, Farm Electrification and Soil and Water Management.

REECE, Disney Harold. "A Comparable Analysis of Safety Standards Being Stressed in Vocational Agriculture Programs." Doctor of Education Dissertation, 1980, Oklahoma State University, Stillwater.

Purpose. An effort was made to analyze and compare agricultural mechanics safety practices and policies of Oklahoma vocational agriculture instructors.

Method. A questionnaire with a five-point scale was used to secure opinions of teachers in relation to the importance of each statement.

Findings. It was concluded that vocational agriculture instructors tend to agree on the amount of importance placed in the areas of safety. Vocational agriculture instructors tend to agree on the accidents which are most frequent in shop programs. Vocational agriculture instructors tend to teach safety in their programs using a similar time frame.

RILEY, David J. "Awareness, Attitudes and Interest in International Development Programs of Selected Agricultural Students at Oklahoma State University." Master of Science Thesis, 1980, Oklahoma State University, Stillwater.

Purpose. The purpose of this study encompassed the awareness, attitudes, and interest of selected agricultural students at Oklahoma State University toward those activities and demands. This study included results from 359 junior, senior and graduate students in Agriculture Education, Animal Science, Forestry, Horticulture, Plant Pathology, Agronomy, Agriculture Economics, Agricultural Engineering and Entomology.

Method. A questionnaire was developed and distributed to the students using 3 methods: hand-outs in class where time permitted, distribution to students to take home where time was limited in class, and others mailed to graduate students who were hard to reach in class.

Findings. Analysis of findings showed three major categories of students. The largest group were those who were basically unaware and possessed little interest in international development programs, but they believed international interchange is beneficial. The second group were those that were unaware, had absolutely no interest in becoming involved and had very strong negative attitudes toward international involvement. The third group was the smallest of the three groups. These students had some awareness, a very strong interest in becoming involved and a very strong positive attitude towards international interchange. Total commitment and mobilization of all resources are necessary to bridge the gap of deficiencies illustrated by the study.

SMITH, Steven Carl. "First Year Teacher Perceptions of the Pre- and In-Service Programs of the Agricultural Education Department at Oklahoma State University." Master of Science Thesis, 1980, Oklahoma State University, Stillwater.

Purpose. This study sought to determine the first year teacher perceptions of the pre- and in-service programs of the Agricultural Education Department at Oklahoma State University.

Method. Forty-one beginning teachers were asked to respond to a mailed questionnaire. The information solicited pertained to competencies they now possess in selected areas; how much competence was secured from O.S.U.; which competencies are needed in the field; and the extent to which competencies should be taught. The teachers were asked to respond on a five point Likert Scale. The data received from the respondents were evaluated to determine mean, standard deviation, frequency and percentages.

Findings. The findings of this study indicate that, as a whole, the teachers felt they possessed adequate competence in the areas of this study.

YOAKUM, Harold M. "Skills Needed in Animal Science as Perceived by Teachers of Vocational Agriculture in Oklahoma." Master of Science Report, 1980, Oklahoma State University, Stillwater.

Purpose. The purpose of this study was to determine what skills in Animal Science are needed by Vocational Agriculture teachers in Oklahoma. A part of the study was to determine when the skill should be taught.

Method. The 345 teachers of vocational agriculture were surveyed using a questionnaire which contained a five point "Likert-type" scale for teachers to indicate their responses.

Findings. The response of the teachers indicated that all of the skills listed on the questionnaire were of "average" or of "much' importance. The study also showed that a high percent of the teachers felt that there is a definite need for more animal science preservice courses.

PENNSYLVANIA

ATTARIAN, A. Ronald. "The Professional Horticulture Competencies for Entry Level and Experienced Vocational Horticulture Teachers in Pennsylvania." Ph.D Dissertation, 1980, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to identify the professional horticulture competencies that a vocational horticulture teacher must perform successfully, and to distinguish between those competencies needed by an entry level teacher and those competencies needed by an experienced teacher. It also was designed to examine differences in the ratings of the competencies by the teacher sample with regard to selected educational and personal characteristics.

Method. The sample consisted of undergraduate students in agricultural education and horticulture at The Pennsylvania State University, beginning vocational horticulture teachers, experienced vocational horticulture teachers, and administrators and craft committee members from vocational agriculture departments in Pennsylvania.

A survey instrument was developed, which included demographic questions and 256 professional horticulture competencies. The competencies were placed into five categories: general horticulture, floriculture/greenhouse management, landscape horticulture/nursery management/turf technology, horticulture mechanics, and fruits and vegetables.

Findings. Competencies rated 3.00 (on a Likert scale of 1.00 to 5.00) or higher by the total sample were considered necessary for successful performance by a teacher of vocational horticulture. One-hundred eighty competencies were considered necessary for an entry level vocational horticulture teacher. Two-hundred forty-four competencies were considered necessary for an experienced vocational horticulture teacher.

There were few significant differences in the ratings of the horticulture competencies when compared by teachers' sex, age, years of teaching experience, and years of horticulture related work experience.

Significant differences in the ratings of the horticulture competencies were observed based on teachers' level of education, undergraduate major in college, size of the vocational agriculture department, and horticulture subject area taught.

BURIAK, Philip. "Competency Levels in Agricultural Mechanics Needed and Possessed by Instructors of Vocational Agriculture in Pennsylvania." M.S. Thesis, 1980, The Pennsylvania State University, University Park.

Purpose. To determine if a need exists for increased instructor training in agricultural mechanics skills, abilities, and understandings.

Method. Randomly selected samples were obtained from a population consisting of all vocational agriculture instructors presently employed in Pennsylvania's approved programs of agricultural mechanics, agricultural production, and horticulture. Data collection was facilitated by the use of a survey form identifying 148 skills, abilities, and understandings related to agricultural mechanics. Instructors were asked the following in reference to each item:

1. The degree of competence needed to be an effective teacher;
2. The degree of competence presently possessed; and
3. If the skill or ability is possessed, where in the training program was this competency developed?

Subjects received the survey instrument through the mail; nonrespondents were encouraged by follow-up mailing and/or direct contact. Data were coded and transferred to data processing cards. The noncorrelated t test, ANOVA, and Tukey WSD were used for statistical analysis.

Findings. The mean needed competence was found significantly higher than the mean possessed competence for 115 of the 148 agricultural mechanics skills at $p \leq .05$. Mean possessed competence classified according to biographical data yielded significant difference for four of seven grand means. The majority of instructors developed competence through self-teaching, then college, then high school; with the least competence developed through in-service.

FERRY, Earl W. "The Development of An FFA Tractor Trouble Shooting Contest". M.S. Thesis, 1980, The Pennsylvania State University, University Park.

Purpose. The purposes of this study were to review tractor trouble shooting contests from states presently conducting such contests; to develop a tractor trouble shooting contest for Pennsylvania; to operate the contest as developed on a pilot basis; and to collect and summarize reactions toward the contest by the participants, their teachers, and by a jury of experts.

Method. A letter was mailed to FFA association and land grant institutions of states known to operate tractor trouble shooting contests requesting information relative to these contests. This information was then used to develop a contest which was tested on a pilot basis in the SUN advisory area of Pennsylvania FFA. On the basis of the pilot test results, the reactions of the participants, their teachers and the jury of experts, the contest was revised and offered to the Pennsylvania FFA Activities Week Committee for consideration.

Findings. The tractor trouble shooting contests conducted by other states throughout the nation vary greatly but they all demand a high degree of mechanical knowledge as well as exacting standards of workmanship. The tractor trouble shooting contest developed by the author for possible incorporation into the Pennsylvania FFA contest program had few faults and was well liked as determined by the reactions of the students and teachers involved in the pilot test as well as the jury of experts. Although the contestants enjoyed the competition they did not perform well, as no team was able to restore their tractor to operation in the time allocated and none performed well on the written exam. This indicated that the contestants were not prepared for competition. Perhaps more teacher education is needed in this area to enable teachers to prepare students for this situation.

HAFFEY, Timothy L. "Development of a Vocational Agriculture Educational Unit - Production of Foliage Plants." M.Ed. Thesis, 1979, The Pennsylvania State University, University Park.

Purpose. The purpose of this study was to develop two educational units on foliage plants to be used in the teaching of vocational horticulture. Objectives included: (1) determining which foliage plants were most commonly used in high school greenhouses; (2) determining which foliage plants had the least number of problems associated with growing them; (3) gathering cultural information relevant to the teaching the production of foliage plants; and (4) writing an instructional unit and study cards covering 50 foliage plants with the assembled information.

Method. A list of 84 foliage plants was compiled into a survey which was sent to the 41 instructors who had teams that competed in the 1978 National FFA Floriculture Contest. The survey was to determine which foliage plants were commonly being used in the high school greenhouses and which plants could be grown with the least difficulty under high school conditions. Technical and home gardening publications were then used to develop the educational unit.

Findings. Twenty-seven instructors responded to the survey. Fifty plants were selected for the instructional units, based on the number of teachers who reported growing each kind of plant and on the ease of culture of each as reported to them.

A 27-page instructional unit "Foliage Plants" and a set of study cards to accompany it were written from the data gathered and the assembled cultural information.

It is recommended that the unit be field tested, refined, and included in an instructional manual, Greenhouse Crop Production.

HEIZENROTH, Walter R. "The Relationship Between Selected Variables and the Self-Concepts of Preservice Teachers of Vocational Agriculture." Ph.D. Dissertation, 1980, The Pennsylvania State University, University Park.

Purpose. The major purpose of this study was to investigate the relationship between selected variables and the self-concepts of preservice teachers of vocational agriculture. A secondary purpose of the study was to describe the attitudes of preservice teachers of vocational agriculture and to determine the relationship between selected factors and the attitudes of these preservice teachers toward vocational agriculture.

102

Method. The sample consisted of 87 freshman, sophomore, junior and senior preservice teachers of vocational agriculture enrolled in a baccalaureate degree program at The Pennsylvania State University, University Park Campus.

The dependent variable was the self-concept of preservice teachers of vocational agriculture. The independent variables were: (1) years of enrollment in vocational agriculture, (2) level of participation in high school FFA, (3) level of participation in a supervised occupational experience program, (4) college grade point average, (5) level of participation in Collegiate FFA, (6) level of participation in Alpha Tau Alpha, (7) socioeconomic status, (8) attitude towards vocational agriculture, (9) amount of related occupational experience, (10) sex, (11) residential background, and (12) type of enrollment.

A packet of materials consisting of the Tennessee Self-Concept Scale, an Attitude Inventory, and a questionnaire was administered to each preservice teacher of vocational agriculture during the Spring Term of 1979.

Findings. Seven null hypotheses were formulated and tested. The significant findings of this study were:

1. A positive but low relationship (r= .2079) was found to exist between Total Conflict and net income earned from the supervised occupational experience.
2. Positive but low relationships were found to exist between grade point average and Total Positive (r= .2286), Personal Self (r= .2393), and Family Self (r= .2270).
3. A positive but low relationship (r= .2151) was found to exist between Total Conflict and parents' net income.
4. Negative but low relationships were found to exist between Total Positive and vocational agriculture teacher (r=-.2677), vocational agriculture (r=-.2431), and combined attitude value (r=-.2392). Negative but low relationships were found between Behavior and vocational agriculture teacher (r=-.2572), vocational agriculture (r=-.2538). Negative but low relationships were found to exist between Personal Self and vocational agriculture teacher (r=-.2373), vocational agriculture (r=-.2592), and combined attitude value (r=-.2189).
5. The mean Personality Integration score of the single majors was significantly higher than the mean score of the dual majors.
6. Female preservice teachers of vocational agriculture had a significantly more favorable mean attitude score toward vocational programs than did males.
7. Preservice teachers of agriculture with rural residential backgrounds had a significantly more favorable mean attitude score toward FFA than either suburban and urban preservice teachers.
8. Those preservice teachers of vocational agriculture who were enrolled in a vocational agriculture program had a significantly more favorable mean attitude score toward FFA than did those preservice teachers who had never enrolled in vocational agriculture.
9. The preservice teachers of vocational agriculture who were members of the Collegiate FFA had significantly more favorable mean attitude scores toward vocational programs, FFA, vocational agriculture teacher, vocational agriculture, and combined attitude value than did those preservice teachers who were not members.

KANTNER, David L. "An Assessment of Extension Agricultural Programs as Perceived by Extension Clientele." D.Ed. Dissertation, 1980, The Pennsylvania State University, University Park.

Purpose. The purpose of the study was to assess the quality of county Agricultural Extension programs as perceived by Extension clientele. A secondary purpose of the study was to test a system for eliciting the perception of Extension clientele regarding Extension program outcomes and processes.

Method. The population for this study consisted of 3,280 Extension clientele, 67 county executive committee members, 12 agricultural agents, and two regional assistant directors in the Southern Allegheny Region located in south-central Pennsylvania. The survey instrument was sent to a stratified random sample (20 percent sample of the population in each of the six counties) of the clientele. The same survey instrument was also sent to the 67 county executive committee members. Fifteen county agents and two regional assistant directors responded to the survey instrument.

A survey instrument developed by Young and Cunningham (1977) was identified and modified.[1] Extension clientele, county executive committee members, agricultural agents, and regional assistant directors were asked to respond to 44 statements concerning the total Extension agricultural program. Each respondent was asked to circle one of five responses--from excellent to poor--that best expressed his/her evaluation of that element of the total Extension agricultural program in that county. The five-point Likert scale was used. Excellent ratings were valued 5, and poor ratings were valued 1. A data sheet was used to obtain background information.

Three null hypotheses were formulated and tested. The significant findings of this study are as follows:

1. There was a difference in how the four Extension groups (Extension clientele, county executive committee members, agricultural agents, and regional assistant directors) perceived the quality of Extension agricultural programs. Agricultural agents had the highest assessment of the quality of the agricultural program, followed by the county executive committee members, Extension clientele, and regional assistant directors.
2. Extension clientele who had served on Extension executive committees did not rate the Extension agricultural program differently than those who had not served on an Extension executive committee. Degree of participation in Extension educational programs, years of formal education, and age level were three factors which had a significant influence on how Extension programs were perceived. The greatest degree of dissatisfaction with the Extension programs was with those Extension clientele who did not attend educational meetings, those who had completed 1-4 years of college, and those who were 66 years of age or older.
3. The type of enterprise from which Extension clientele received their major source of income had little relationship to program ratings.

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[1] Young, Richard E. and Cunningham, Clarence S. Extension Output Measures as Identified by Extension Clientele. Final Report. Columbus, Ohio: Cooperative Extension Service, The Ohio State University, 1977.

4. The mean amount of time spent by Extension staff on agricultural programs, mean number of meetings held, mean number of radio programs presented, mean number of individual assistances, mean years of formal education (educational level), mean years in current position in county, and mean years in Extension apparently had no influence on the program ratings by the Extension clientele.

METALA, Sylvester O. "A Procedural Model to Identify Agricultural Skills for a Competency-Based Program with Implications for Nigeria." M.S. Thesis, 1980, The Pennsylvania State University, University Park.

Purpose: The purpose of the study was to identify the competencies required in production agriculture in the areas of grain, poultry, and swine production. Another purpose of the study was to identify the competencies taught in the high school vocational agriculture programs which were related to the specified enterprises. It was also the purpose of the study to determine the level to which the high school vocational agriculture programs were teaching the identified competencies. The three enterprises, grain, poultry, and swine production, were selected for this study because they were practiced both in Pennsylvania and in the Bendel State of Nigeria, where is was hoped that this study would be replicated and the findings implemented.

Method. The approach used in this study was to identify the differences in the young farmers' self-perceived level of competence in selected skills in grain, poultry, and swine production before entering high school and after high school, and their ratings of the importance of the skills to their farming career. The data were collected by means of survey questionnaires mailed to 150 young farmers randomly selected from a list of 2,400 young farmers in the state of Pennsylvania. Forty-one young farmers completed the questionnaires for a response rate of 27 percent, and the data collected from them were analyzed for this study. T-test was used for testing the significance of the differences in the first hypothesis, while the PPMr (Pearson Product Moment Correlation Coefficient) was used to test the relationship in the second hypothesis. All analysis was done by the use of the computer package, S.A.S. (Statistical Analysis System) at The Pennsylvania State University.

Findings. Three hypotheses were identified of which two were tested. The hypotheses and the findings were:

1. Young farmers' self-perceived level of competence in selected skills in grain, poultry, and swine production will be significantly higher after high school vocational agricultural enrollment than before enrollment.
   The young farmers perceived that they had a significantly higher level of competence in the specified enterprises after completing the high school vocational agriculture program than they did prior to entering the program.
2. There is a positive relationship between the young farmers' self-perceived competency rating in selected skills in grain, poultry, and swine production after high school vocational agriculture training and their rating of the importance of the skills to their farming career.

Significant positive correlation coefficients were found in all the skill areas of grain and swine production, and in 25 skill areas of poultry production. Significant negative correlations were found in five of the skill areas of poultry production. No significant correlation was found in one poultry production skill. Therefore, all the skills learned from the high school vocational agriculture programs in grain and swine production, and 25 of the thirty-one poultry production skills were very relevant and important to the farming career of the students when they left the high school.

3. Young farmers who had high school vocational agriculture training will have significantly higher ratings of competence in selected skills in grain, poultry, and swine production than young farmers who did not have high school vocational agriculture training. It was not possible to test this hypothesis because of insufficient data.

MURPHY, Dennis J. "Relationship of Attitudes Toward Farm Safety Concepts and Farm Accident Involvement." Ph.D. Dissertation, 1979, The Pennsylvania State University, University Park.

Purpose. Many safety educators firmly believe that good safety attitudes are a must if people are to avoid accidents in the workplace and elsewhere. This idea has evolved mainly from the industrial safety movement and has been adopted in most fields of safety such as traffic, aviation, agriculture, and the like. However, this fundamental adage has never been tested in some of these fields, particularly agriculture.

There are many differences between industrial safety and agricultural safety. Inclement weather, time, poor crop and livestock prices, and societies expectation of the farmer to be a rugged, tough, independent individual are just a few of the subtle pressures exerted on farmers that are not felt by many other workers. Many of these pressures work directly against the farmer's safety and are suspected to be related to a number of farm accidents.

Method. A random sample of 1,500 Pennsylvania farmers were asked their attitudes toward 15 nationally recognized farm safety concepts. Farm Safety Concepts were defined as nationally recognized safe operating or working procedures, rules or practices. The Semantic Differential Attitude Test was used to collect attitude data. The Semantic Differential is a bi-polar adjective scale which allows that respondent to indicate not only his preference but also the intensity of that preference. Other pertinent data about the subjects were obtained through questions at the beginning of the questionnaire.

Findings. Four hundred ninety-three respondents indicated they had about the same attitudes towards farm safety concepts regardless of their accident involvement. In other words, those farmers who were involved in farm accidents expoused just as good an attitude toward safety as those farmers who had no accidents. In addition, farmers' expressed attitudes did not differ significantly regarding farm safety when analyzed by size of operation, type of operation, hours spent working on the farm, or level of education. The results of this study suggest that the apparent high priority farm safety educators give to safety attitude promotion should be re-examined. In addition, educators should deal with the subtle pressures exerted on a farmer that often increase his chance of an accident. Farm safety education programs should help farmers recognize these pressures and to deal with them. Too, poor safety attitudes should not be used to explain away farm accidents caused by unsafe acts of the farmer.

RHODES, Kenneth B. "Student Achievement and the Use of a Greenhouse-Production Record Book and Potted-Chrysanthemum Unit of Instruction." Ph.D. Dissertation, 1980, The Pennsylvania State University, University Park.

Purpose. Keeping records of "hands-on" experiences has provided high school vocational agriculture students with a systematic approach to developing skills for employment. There is a need for a greenhouse-production record book for vocational agriculture students preparing for careers in the greenhouse industry.

The practice of providing "hands-on" or supervised experience in agriculture is not a new concept. With the passage of the Smith Hughes Act in 1917, supervised experience in agriculture on a farm became an accepted procedure for providing "hands-on" learning experiences. To supplement classroom instruction, high school vocational agriculture students were required to keep records of the practices that were used on a farm.

Under the Vocational Education Act of 1963, vocational agriculture programs were broadened to include off-farm agricultural occupations. The Vocational Amendments of 1968 increased support for vocational education and consolidated previous legislation. By this time, high school students studying vocational agriculture were selecting new careers in forestry, natural resources, horticulture, and agriculture supplies and products as well as farming. The traditional "hands-on" experiences obtained by working on a farm no longer provided the skills needed for off-farm careers.

Method. A greenhouse record book and a potted-chrysanthemum unit were developed to be used as the independent variables in this study. A potted-chrysanthemum scoresheet and a potted-chrysanthemum test were developed to measure the achievement of the students. The mean crop quality scores and mean test scores were the dependent variables. All the resources developed for the study were reviewed by a panel of specialists, field tested by teachers, and revised before the experimental study was initiated.

The design selected for the study was a modified posttest-only control group design. The population for this study included selected high schools and area vocational-technical schools with horticulture departments in Central and Eastern Pennsylvania. Twenty-eight schools were contacted by telephone to obtain 20 schools who met the criteria. All 20 schools were used in the study; the schools were randomly assigned to the levels of the treatment. Five classes received the greenhouse record book coupled with the potted-chrysanthemum unit (X_1); five classes received only the greenhouse record book (X_2); five classes received only the potted-chrysanthemum unit (X_3); and five classes received the teachers' own instructional materials (X_4).

Findings. The principal conclusion of the investigation was that the potted-chrysanthemum unit was effective in promoting cognitive learning about potted-chrysanthemum production. The results supported the belief that the students who received the potted-chrysanthemum unit would score higher on a cognitive test than students who did not receive the potted-chrysanthemum unit. The potted-chrysanthemum unit and the greenhouse record book when used independently were effective in helping students to grow better quality potted chrysanthemums.

SHADLE, James S. "Factors Influencing the Tenure of Vocational Agriculture Teachers." D.Ed. Dissertation, 1980, The Pennsylvania State University, University Park.

Purpose. In practically every state, the historical shortage of teachers of agriculture continues, thus hampering program development in vocational agriculture. This shortage exists even though the Departments of Agricultural Education have adopted as their number one goal, the intention to provide an adequate supply of qualified teachers.

The primary objective of this study was to identify the factors associated with the reasons teachers leave the profession. The degree of influence that the student teaching center and the cooperating teacher had on the tenure of the vocational agricultural teacher was viewed as prime variables for this study.

Method. The population was the 1972-1978 graduates and others certified to teach vocational agriculture by the Department of Agricultural Education. One hundred eighty-four names were secured. Addresses were located for 155 graduates. From these 155, a return of 71.4 percent was realized from the teacher and nonteacher surveys mailed. The survey form developed by Knight at Ohio State was adopted for this study.

Student and teacher pilot surveys were used to provide validity for the types of questions that needed to be answered. In addition, questionnaires gathered data on the cooperating teachers and the cooperating teacher centers.

Findings. The principal findings of this study were:

1. A relationship was found between cooperating teaching centers and the tenure of vocational agricultural teachers.
2. A relationship was found between years of 4-H membership and tenure in teaching.
3. Some cooperating teachers and some student teaching centers placed a higher proportion of graduates into teaching than did others.
4. Teachers who became certified by the vocational route did not have as long a tenure in teaching as agricultural education graduates.
5. Salaries of starting teachers were lower than nonteachers but after a few years the average salary of teachers surpassed that of nonteachers.
6. There was evidence that 25 percent of the cooperating teachers have decelerated their agricultural mechanics program.
7. Since total high school student population is decreasing, there has been an additional emphasis placed on adult education.

The main reasons, in order of their importance, given for leaving the profession were:

1. Long-range occupational goal was something different than teaching vocational agriculture.
2. Salary.
3. Inadequate administration support and backing on decisions.
4. Students in class who should not have been in vocational agriculture.
5. Disliked students' attitudes.
6. Disliked disciplining students.

STRICKLER, Phyllis Fay. "Meat Shopping Practices of Low-Income Families." M.S. Thesis, 1980, The Pennsylvania State University, University Park.

Purpose. This research deals with the meat shopping practices of low-income homemakers -- Blacks, Whites, and Hispanics who are currently enrolled or were former participants in the Expanded Food and Nutrition Education Program (EFNEP).

Method. The data were obtained from 228 current and 44 graduated homemakers in Berks County and in the city of Reading, Berks County, Pennsylvania. This study reports information obtained through personal interviews with homemakers conducted by paraprofessionals employed by the Cooperative Extension Service.

The general hypothesis of this study was that meat shopping habits are associated with ethnic groups and tenure in the Program. The specific hypotheses tested were as follows: Hypothesis One: There is no significant difference in frequency of shopping among ethnic groups studied; Hypothesis Two: There is no significant difference in store preference among ethnic groups studied; Hypothesis Three: There is no significant difference in the kind of meat purchased most frequently in Black, White and Hispanic households; Hypothesis Four: There is no significant difference in the amount of money spent for meat in proportion to their income among Black, White and Hispanic homemakers; Hypothesis Five: There is no significant difference in the kind of meat purchased between currently enrolled EFNEP homemakers and the graduated homemakers. Hypothesis Six: There is no significant difference in the amount of money spent on meat in proportion to their income between currently enrolled EFNEP homemakers and graduated homemakers.

Contingency tables and Chi-Square tests were used to examine statistically significant relationships. The .05 level of significance was established as the minimum for hypothesis rejection or acceptance. All hypotheses were rejected totally or in part.

Findings. It was determined that most low-income homemakers shop for meat every other week in large supermarkets. The study also showed that race and tenure in the Program does influence the kind of meat purchased. It was found that Black, White and Hispanic homemakers in the lower income bracket spent less for meat per week while those in the higher income bracket spent more per week on meat. The study indicated that there were significant differences in the meat shopping practices of current and graduated homemakers and also differences among ethnic groups. The results of the study have direct value for the meat industry and nutrition educators.

WALKER, Keith A. "Evaluation of a Slide Series and Student Handbook for the FFA National Nursery-Landscape Contest." M.Ed. Thesis, 1979, The Pennsylvania State University, University Park.

Purpose. This study describes the development and evaluation of a slide series and student handbook to prepare students to participate in the FFA National Nursery-Landscape Contest. A need for such materials is cited and research discussed as to the value of slides as a teaching tool.

Method. Vocational agriculture instructors evaluated the slide series and student handbook using a twenty-two item Likert-type scale. Data gathered was analyzed by comparing agree and strongly agree responses to total responses across the five-point scale of the survey instrument.

Findings. Results of the survey established that the majority of instructors agreed or strongly agreed that the slide series/student handbook were useful for preparing students to participate in the FFA National Nursery-Landscape Contest. Comments offered by instructors suggested adaptations of the slides to geographic areas and organizational changes in the student handbook.

TENNESSEE

LAMBERTH, Edwin E. and GRIFFIN, Sumner A. "A Follow-up Study of Graduates of the College of Agriculture at Tennessee Technological University." Staff Study, 1980, Tennessee Technological University, Cookeville.

Purpose. The purpose of this study was to follow-up graduates of the College of Agriculture at Tennessee Technological University for the years 1977-78, 1972-73, 1967-68, 1962-63, 1957-58, 1952-53, and 1947-48.

Method. A follow-up questionnaire was developed by the faculty of the College of Agriculture. Mailing labels for graduates were obtained from the Tennessee Tech Alumni Office. For the years selected to study, there were 271 graduates of the College of Agriculture. A questionnaire, a letter of instruction, and a self-addressed stamped envelope were mailed to each graduate. Approximately three weeks after mailing the questionnaires, a follow-up letter was sent to each graduate who had not returned the questionnaire. One-hundred and eleven, or 40.9 percent, of the graduates returned usable questionnaires.

Findings. The findings were as follows: (1) The agriculture graduates were satisfied with the training they received. Twelve percent rated their training more than adequate, and 82 percent rated it adequate. (2) The graduates believed the agricultural program was a sound professional program, adequate for today's professions. Strong points of the program were quality instructors and their genuine interests in students. (3) The graduates felt that the program did not include sufficient practical agricultural experiences. (4) A majority of the graduates were employed in agricultural occupations related to their majors at Tennessee Tech. Fifty-five percent were employed in related occupations. (5) Most of the graduates stayed in Tennessee to work. Seventy-two percent were employed in Tennessee. (6) The graduates had stable employment records. Approximately a third had worked for the same employers since graduating from Tennessee Tech. (7) The graduates were employed in a variety of agricultural occupations. They held seventy job titles with forty-six different employers. (8) The graduates held prominent leadership positions in agriculture and agribusiness. (9) Management and education were the most common job tasks performed by the graduates. (10) The average salary of the respondents was $20,841.34. (11) Many of the graduates had continued their education. Twenty-nine percent had earned an advanced degree, and 12 percent were working toward an advanced degree. Another 16 percent had completed one or more non-degree courses. (12) Most of the graduates who continued their education did so in Tennessee.

TEXAS

LEDESMA-SCHOUWE, Rafael A. "Role Perceptions and Attitudes of Dominican Republic Extension Agents." Doctor of Philosophy Dissertation, 1980, Texas A&M University, College Station.

Purpose. The purpose of this study was to determine the role perceptions of provincial Extension workers in the Dominican Republic Extension Service and their level of job satisfaction since it was theorized that actual role perceptions and behaviors of agents as contrasted with their normative or formal role requirements could substantially influence the success or failure of the mission of the entire organization.

Method. Data were collected by means of a mailed questionnaire from 77 per cent (95) of the Extension agents employed on January 1, 1977 who worked directly with clients in the field. The instrument used was a modification of the Shriver (1969) instrument adopted to the Dominican Republic. Data were secured on role perceptions, job satisfaction, attitudes toward the Extension organization, and role changes resulting from changes in existing agricultural program policies that had occurred.

Findings. Change in role perception was revealed by increase in importance attributed to new community groups and to technical subject matter areas but by a decrease in importance of service to agricultural and homemaker groups. All agents believed that they should perform activities as the expert/teacher and initiator/organizer in traditional subject matter areas and as a liaison and initiator/organizer in non-traditional subject matter areas. Main sources of dissatisfaction for all groups of agents were salary, working conditions, and the job itself which in turned seemed to be an indication of lack of resources and an inadequate communications system within the organization. Sources of satisfaction were achievement, inter-staff relations, and job factors affecting personal life. The majority of agents classified their role as change agents with their major function being one of education.

MILLER, William Wade. "Master of Agriculture and Master of Science Graduates of the College of Agriculture at Texas A&M University 1974-1978: A Follow-up with Comparison of Selected Factors." Doctoral Dissertation, 1980, Texas A&M University, College Station.

Purpose. The primary purpose of this investigation was to determine if changes were warranted in the master of agriculture and master of science curricula at Texas A&M University in preparing graduates for careers. A secondary purpose was to compare selected factors to determine if one degree seemed to hold greater promise than the other for students undecided about which degree program to select.

Method. Data were obtained from questionnaires returned by 432 or 74.5 percent of the master's graduates for the years 1974 through 1978. In most cases, date collected were tabulated and placed in frequency tables showing number and percent of the two groups of former master's students by their responses to the items. Analysis of variance and chi-square analyses were used to test [illegible] 11 hypotheses.

Findings. Master of agriculture respondents indicated that "the practicality of the master of agriculture degree program" was the most important factor in their decision to earn that degree instead of the degree of master of science. Former master of science students rated the factor "felt that master of science degree was a good route to further graduate education" as most important in the choice of their degree program.

More than three-fourths of both groups of graduates were satisfied with their choice of degree program and university. A majority of former master's students rated the quality, effectiveness, and benefit of their graduate program highly. There were no significant differences between the ratings of the two groups of respondents.

A majority of the master of agriculture graduates recommended increasing or adding courses in finance and a majority of master of science alumni recommended an increase or the addition of courses in computing science and technical writing.

Almost two-thirds of both groups were employed in their field of graduate study or a closely related field. The most frequent categories of employment were "professional agricultural specialist," "non-agricultural or non-natural resources occupation," and natural resources occupation."

UTAH

ISRAELSEN, Clark E. "Assessing the Performance Capabilities of Senior Vocational Agriculture Students in Utah." Master of Science Thesis, 1980, Utah State University, Logan.

Purpose. The purpose of this study was to assess Utah vocational agriculture seniors technical knowledge level in agribusiness and production agriculture by administering validated criterion - referenced tests.

Method. Two separate multiple choice criterion - referenced tests, consisting of 60 questions each, were developed from previously validated tests. Test questions were selected to measure specific areas of technical knowledge previously determined, by representatives of Utah's agricultural industry, as essential for entry into specific job areas of production agriculture or agribusiness. Senior vocational agriculture students were asked to select the correct answer while instructors indicated on a Likert-type scale the degree of emphasis each individual test item received in their curriculums. Seven hypotheses were developed and tested using Kendall's Tau and two tailed t-tests at the .05 level of significance.

112

Findings. A review of the study revealed that: (1) a small positive relationship (.20) existed between vocational agriculture teachers' emphasis on agribusiness skills and what Utah's agribusiness industry said should be emphasized, while no relationship (0) existed between vocational agriculture teachers' emphasis of production agriculture skills and what industry said should be emphasized; (2) there was a strong positive relationship (-.80) existed between teacher emphasis and student performance on the production agriculture portion; (3) students with a career goal in agribusiness or production agriculture did not score significantly higher on the respective portions of the test than did students without specific career goals; (4) students with supervised occupational experience and/or supervised farming projects scored significantly higher on the respective tests than did students without supervised training; (5) students who had taken a combination of agricultural mechanics and agriculture science classes scored significantly higher on the agribusiness portion than students who had taken only agricultural mechanics classes, but lower than students who had taken only agricultural science classes; (6) students from single teacher departments scored significantly higher on both tests than students from multiple teacher departments; and (7) a positive relationship exists between student involvement in FFA activities and performance on the criterion - referenced tests.

KOWSARY, Mehdi. "A Visually Mediated Instructional Lesson Outline For Tractor Maintenance in Iran." Master of Science Thesis, 1980, Utah State University, Logan.

Purpose. To develop a series of mediated lesson plans for teaching tractor maintenance to Iranian farmers and students.

Method. A methodology was followed that would motivate students to become competent at tractor maintenance. An audio tape color slide set was produced that was technically accurate and attractively mediated.

Findings. The teaching resource developed is ready for try-out in Iran. Further refinements can be made based upon experience with it.

MORY, Cesar Augusto. "Guidelines for Conducting Follow-up Studies of Piura State Agricultural College Graduates." Master of Science Thesis, 1980, Utah State University, Logan.

Purpose. The purpose of this study was to identify a follow-up procedure for use in evaluating Piura State University students.

Method. The methodology for this study was to review available literature about follow-up studies and evaluation. The Agricultural and Education background of Peru was examined in order to provide appropriate context for selected follow-up guidelines.

Findings. Follow-up studies should be used as a part of evaluation efforts to provide information to decision makers. The follow-up study objectives should be developed with the participation of instructional program personnel. Specific "question" oriented objectives should be developed from the objectives for the instructional program.

Specific assignment of personnel responsible for collection of the follow-up information should follow.

The National Center for Research in Vocational Education identified three broad categories used for the purpose of developing questions for gathering information from former students: occupational history since graduation; present interest, activities and affiliations and educational history since graduation. These categories were examined and discussed relative to their usefulness in higher education in Peru.

SUMMERS, James O. "Job Competencies, Employment Demands, and Perceived Training Needs in Production Agriculture in Utah." Master of Science Thesis, 1980, Utah State University, Logan.

Purpose. The purpose of this study was to identify the currently needed skills and manpower needs for entry level employment in production agriculture.

Method. This study was limited to 165 farmers involved in various segments of production agriculture in the state of Utah. County agents and vocational agriculture teachers in each county nominated these farmers as candidates according to their respective farming operations.

The following six defined areas of production agriculture were used as selection criteria to insure equal input in the study: Beef, Dairy, Swine, Sheep, Poultry, and Crops. All farmers were surveyed by means of personal interviews conducted by either county agents or vocational agriculture instructors in their respective counties. The surveying instrument used was developed through a thorough review of the National Agricultural Competency Study list of skill questions. Farmers were asked to rank on a Likert-type scale, the importance each skill had on their operation. Farmers were also asked to reply yes or no to whether or not they needed additional training in each skill area. Eleven categories of competencies were used in the study in an attempt to highlight all areas of production agriculture. Data were compiled and a Borroughs 6700 computer was utilized for program evaluation to find means, ranking, ranges, and frequencies.

Findings. Over one-third of all farmers surveyed terminated their formal education after high school. This places a great deal of emphasis on high school agriculture curriculum as well as adult education programs.

Many areas of production agriculture have overlapping areas of skills and competencies.

There is a commonality of competencies needed by all those entering the production agriculture industry.

Areas of animal health, equipment maintenance, soil preparation, and planting as well as legal practices and safety precautions, all placed very high in ranks of importance throughout the study.

Most employment figures are projected to remain relatively constant with a 10% or less fluctuation projected over a five-year period. The only exception is that of part-time non-family employees which shows a decrease of 18%.

One-hundred-ten of the one-hundred-fourteen competencies surveyed in the study were considered to be of some importance to the agriculture industry.

VIRGINIA

Virginia State University

DORN, D'Andre K. "A Study of the Former and Current Educational Experiences of Black Farmers in Programs of Vocational Agriculture in Virginia." Master of Science Thesis, 1980, Virginia State University, Petersburg.

Purpose. The major purpose of this study was to ascertain the former and current educational experiences of a group of Black farmers presently enrolled in programs of vocational agriculture in six selected Virginia counties.

Method. The data were secured through the utilization of a questionnaire that was administered to 50 Black farmers during (1) adult vocational agriculture classes; and (2) through personal interviews conducted by the investigator. Usable data were received on subject areas, skills, field trips, leadership training, demonstrations, and supervised farming programs.

Findings. The study revealed that 43 percent of the respondents listed crop production, livestock production, and leadership training as former subjects of study. Woodworking and arc welding were found to be the principal former skills acquired. In terms of field trips, 71 percent of the subjects reported the farm tour and the state fair. It was further disclosed that 86 percent of the farmers formerly encountered leadership training through affiliation with either the Future Farmers of America or with the New Farmers of America. The major current subject areas of study were revealed to be crop production, farm management, and farm power and machinery. Current demonstrations were received by 52 percent of the respondents in woodworking, arc welding, and gas welding. Approved projects in current supervised farming programs were completed by 89 percent of the farmers studied.

DUNN, Daniel R. "A Study of Factors and Instructional Methods Used in Teaching Agricultural Mechanics to Special Needs Students." Master of Education Project, 1980, Virginia State University, Petersburg.

Purpose. The purpose of this study was to ascertain certain characteristics of the organization, nature of offerings, physical facilities, and instructional methods used in teaching agricultural mechanics to Special Needs Students.

Method. The list of Special Needs Teachers was secured from the office of the State Supervisor and a questionnaire was developed and sent to each teacher. Data were secured on the organization of the Special Needs Programs, type of offerings, condition of facilities and equipment and the most appropriate instructional methods to use in teaching agricultural mechanics.

Findings. This study revealed that there has been a continuous decline in the number of new programs of Special Needs since 1973. Most programs were started for students whose needs were not being met by present school offerings, and most programs were being offered for either one or two years. A majority of the respondents included only four instructional areas in their programs. Fourteen respondents indicated that their equipment and facilities were good, while six respondents indicated fair and six respondents indicated poor equipment and facilities. Fifty percent of the teachers reported the length of class periods were fifty-five minuets. Most of the respondents have been teaching between five and nine years, and were teaching Special Needs Students all of this time. The study revealed that the most appropriate instructional methods to use in teaching welding, carpentry, and metal work were individualized instruction and skill practice sessions; demonstrations and repetition for small engine maintenance; individualized instruction and project construction for woodworking, demonstrations, and project construction for masonry; and demonstrations and individualized instruction for horticulture.

HALL, Earl B. "Effective Teaching of Exploratory Agricultural Students Who Enroll in the Eighteen-Week Course at the Middle and Junior High School Levels in Virginia." Master of Education Project, 1980, Virginia State University, Petersburg.

Purpose. The purpose of this study was to determine effective ways of teaching the eighteen-week course in Exploratory Agriculture to new enrollees.

Method. For the purpose of obtaining relevant information, the researcher developed two questionnaires. One questionnaire was sent to selected teachers of Exploratory Agriculture in Virginia. The sample population included fifteen teachers. The data obtained included teaching strategies, teachers' experiences, teachers' interests and areas of instruction taught. The second questionnaire was sent to students who were enrolled in Exploratory Agriculture for the school year, 1979-80. The sample population included forty students from four schools in Virginia offering a course in Exploratory Agriculture. The sample included ten students' interests and concerns about Exploratory Agriculture.

Findings. The study revealed that students enrolled in Exploratory Agriculture at about the age of fourteen. Thirty-five percent of the respondents indicated that class periods were fifty-five minutes in length; classes met five times each week. Exploratory Agriculture programs have been in operation for about six years. One hundred percent of the teachers indicated that they had a planning period and they had not had formal training in teaching Exploratory Agriculture. The data obtained revealed that fifty percent of instruction was held in the classroom and fifty percent of the instruction was held in the shop. The data revealed that teachers could effectively teach animal science, gardening, career orientation and woodworking. Discussion and "hands-on-experiences" were used most as instructional methods.

MCKINNEY, Joseph C. "Soil Conservation in Dinwiddie County 1933-1975." Master of Education Project, 1980, Virginia State University, Petersburg.

Purpose. The purpose of this study was to ascertain (1) why was the Soil Conservation program begun, (2) what were its original objectives and what were they expected to accomplish, (3) how much, in fact, has been accomplished since the program was begun, (4) what have been the obstacles to still greater accomplishments and (5) what remains to be done, as the job is defined by the organizations and persons most directly concerned.

Method. A thorough review of the literature was made by using sources such as books, newspapers, and articles on Soil Conservation. These sources provided information necessary to determine the Soil Conservation program in Dinwiddie County from 1935-1975.

Findings. The major and probably the most influential part of the Soil Conservation program in Dinwiddie County stemmed from the cooperation of farmers and landowners with federal and state agencies. Since 1942, after the formation of the program, it has been mainly voluntary in nature. The organization of the program was a result of the concern of farm organizations and citizens over the rapid deterioration and low productivity of their land. The permanent vehicle set up to convey Scientific Soil Conservation practices to the farmer was the Soil Conservation District. The widespread use of modern Soil Conservation practices on the piedmont plateau in Dinwiddie is especially noticeable when one considers the substantial lack of these practices before 1930. The job remains, as defined by the agricultural leaders, one of reeducation and dedication of all citizens to wise land-use management in order to protect the soil resources of the county.

REED, Kylor B. "A Study of the Impact of Certain Factors on Active 4-H Participation in Prince Edward County, Virginia." Master of Education Project, 1980, Virginia State University, Petersburg.

Purpose. The purpose of this study was to determine if the 4-H members' locality, parental support, type of membership, and/or age had any significant impact on the members' attitudes toward the 4-H program.

Method. A sufficient number of questionnaires was given to the teacher-leaders in the schools where the students who were involved in the study were enrolled. These teacher-leaders administered the questionnaires and the subjects were asked to answer the questions as the teacher-leaders read them. The subjects were asked to respond in light of their experiences and beliefs. In this study, attitude was used as the dependent variable. In order to determine attitude, the subjects responded to statements such as 4-H being helpful to them in one or more ways. They responded to such statements as 4-H could never help them, or on similar statements. The independent variables were locality, parental support, type of membership, and age. To analyze the data, four separate Bivariate Chi Squares analyses were used.

Findings. In regard to locality, of the 4-H members who lived in the rural area, 8 responded positively, and 4 responded negatively. Of the 4-H members who lived in Farmville, 5 responded positively, and 6 responded negatively to the 4-H program. In regard to type of membership, of the 4-H members who responded as in-school club members, 8 responded positively and 4 negatively toward the 4-H program. Of those who responded as community club members, 10 responded positively and 1 negatively toward the 4-H program. In regard to parental support, of the subjects whose parents were supportive of 4-H, 8 responded positively and 4 negatively. For those whose parents were non-supportive, 3 responded positively and 12 negatively toward the 4-H program. Relative to age, in the age group 12-14, 10 responded positively and 4 negatively toward the 4-H program. The responses in from the age group 17-19 were identical to age group 12-14. After testing the findings of this study, it was concluded that only the factor of parental support had any significant impact on active 4-H participation in Prince Edward County.

ROWELTT, Lillie B. "A Study of the Types and Arrangements of Certain Ornamental Shrubberies for Use in Landscaping in the Ettrick Area." Master of Education Project, 1980, Virginia State University, Petersburg.

Purpose. The purpose of this study was to determine the types and arrangements of specific shrubberies used in landscaping in three subdivisions in Chesterfield County, Virginia.

Method. Three subdivisions were selected and a questionnaire was developed and issued to twenty-five randomly selected homes in each of the three subdivisions. Data were secured on the status of the home owner, the type of shrubberies used, and the arrangement of ornamental shrubberies and trees in the landscape.

Findings. This study revealed that the educational level for the majority of these respondents ranged from elementary education through graduate level, their income ranged from thriteen thousand dollars to fifteen thousand dollars, their homes varied greatly in cost, they were first-time property owners, and the majority of them lived less than five miles from work. These respondents indicated that they preferred the following landscape ornamentals: azaleas for their flowers, low-growing evergreens for year-round beauty, and cedar trees over other types of trees. Even though the majority of home grounds were partially landscaped upon assumption of ownership with evergreen shrubberies and deciduous trees, the home owners were not satisfied with present landscape.

TRAVIS, David B. "A Study of Effective Programming for the Retention of Prince George County Teenage 4-H Members." Master of Education Project, 1980, Virginia State University, Petersburg.

Purpose. The purpose of this study was to develop more effective programs for teenage 4-H members in Prince George, Virginia.

Method. A questionnaire was sent to thirty-five teenage 4-H members to collect the data. Information such as age, sex, ethnic origin, social economic status, where they resided, age at which they joined 4-H, various sizes of 4-H clubs, number of leaders working with 4-H clubs, participation in other youth organizations, and other concerns about 4-H was requested in the survey instrument.

Findings. Major findings of this study were as follows: the average respondents were white middle-class females, fifteen to sixteen years of age; the average respondent lived in a rural area, was actively involved in 4-H, and belonged to a 4-H club of five to ten members with three volunteers working with each club; and twelve respondents belonged to two or less other youth organizations, while eight had membership in from three to five other organizations. Respondents felt they should have a voice in planning and implementing all 4-H programs. The study further showed that teenagers prefer specially designed, shorter group related projects with some form of recreation following the completed project.

WHITE, Beauford. "A Study of the Factors Characteristic of Effective Teaching of Disadvantaged Learners Enrolled in Agriculture Special Needs." Master of Education Thesis, 1980, Virginia State University, Petersburg.

Purpose. The purpose of this study was to ascertain the factors which were characteristic of effective teaching of disadvantaged learners who are or were enrolled in Agriculture Special Needs in the State of Virginia.

Method. The list of Agriculture Special Needs teachers was secured from the office of the State Supervisor of Agriculture and a questionnaire was developed and sent to each teacher. A questionnaire was also administered to 45 disadvantaged learners in western Hanover County. Data were secured on teacher background, training, teaching characteristics, class size, funds allocated, facilities, tool availability, teaching methods, and student background and opinions.

Findings. This study revealed that one-third of the teachers ranged from 25 to 29 years of age. Forty percent of the teachers had from 5 to 9 years of teaching experience and sixty percent had less than 9 years of teaching experience. None of the individuals surveyed had taught classes for disadvantaged learners more than 8 years. Class enrollment of 12 to 14 students was found to prevail. Seventy-four percent of the respondents had shop facilities which allowed 100 or more square feet of floor space per student. Funds played only a minor role in the effectiveness of programs for disadvantaged learners. In most shops tool availability was not a problem. Twenty-four of the respondents selected shop competence as the most important teaching characteristic and being optimistic as the least important. The demonstration was the method used most for teaching slow learners and the lecture was the method least used. The class size was the factor chosen as most important for effective programs for slow learners. The average age of the disadvantaged learners in western Hanover County was 17. Over 60 percent of the students had trouble with reading and mathematics All of the students surveyed preferred shop classes over regular classroom work. Ninety-five percent of the students felt that they had developed some usable skill while enrolled in Agriculture Special Needs. Eighty-two percent felt that the teachers had their best interests in mind.

Virginia Tech University

CLOUSE, James P. "Curriculum Materials Development in Agricultural Education." Staff Study, Virginia Tech University, Blacksburg.

Purpose. The purpose of this project was to develop and publish or purchase selected agricultural and professional education materials and distribute them to the teachers of agriculture in Virginia.

Method. Faculty members in the College of Education and in the College of Agriculture and Life Sciences at Virginia Tech prepared or selected the materials for printing and/or purchase. The materials were disseminated at area teacher meetings and at the annual conference of agricultural teachers in Virginia.

Findings. Through this project 18 Learning Activity Packages, 8 Publications, 10 Project Plans, and one Video Cassette were prepared for use by teachers of agriculture in Virginia. In addition, sufficient copies of 9 different publications were purchased for distribution to the agricultural teachers in the state.

DAMANN, Alan S. "Role of the National FFA Organization in Assisting Local FFA Chapters: Implications for the 1980's." Doctor of Education Dissertation, 1980, Virginia Tech, Blacksburg.

Purpose. The primary purpose of this study was to identify perceptions of rural, urban, urban fringe, and central city vocational agriculture teachers concerning the role of the National FFA Organization in coordinating services, resources, programs, and activities relevant to the diverse needs of the local vocational agriculture student. A secondary purpose of the study was to determine the degree of current and future effectiveness of services, resources, programs and activities sponsored by the National FFA Organization.

Method. Vocational agriculture teachers from throughout the Nation comprised the population, of which 469 teachers were systematically selected and grouped according to geographical location (rural, urban, urban fringe, and central city). Data collected by means of a mailed survey instrument were analyzed using the F-Test (Analysis of Variance) and descriptive statistics (Frequencies, Standard Deviations, and Percentages).

Findings. Evidence supporting significant differences among the four teacher groups toward statements concerning the current leadership, coordination, and support role of the National FFA Organization was not found. Additionally, school location failed to significantly alter agriculture teacher perceptions concerning the current and future effectiveness of National FFA services, resources, programs, and activities.

CRUNKILTON, John R., Robert MCGOUGH, and Patricia POPLIN. "Inservice Vocational Education - Utilizing Modules of Teaching Learning Strategies for Developing/Improving Professional Competencies of Vocational and Manpower Teachers of Handicapped Persons." Staff Study, 1980, Virginia Tech, Blacksburg.

Purpose. The purpose of this study is to identify desirable teacher characteristics for serving the mildly handicapped students in vocational education and manpower programs. Special concerns of teachers who work with the handicapped will be identified and modules will be developed that will address those concerns.

Method. Through personal observations and interviews with selected outstanding teachers and handicapped students, desirable characteristics of teachers were identified. An additional survey was sent out to randomly select vocational teachers of handicapped. The concerns were identified and through the use of consultants, the concerns were ranked according to importance. Fifteen instructional modules were then developed that addressed those concerns.

Findings. The desirable characteristics of vocational teachers who successfully work with the handicapped centered around personal characteristics; practices followed in the teaching/learning process; use of selected teaching techniques; application of principles of learning; attitudes of teachers toward the program; and rewards teachers received from working with the handicapped. Modules developed to address the concerns of identified were: Vocational Education for the Handicapped; Developing IEP's; Development of an Instructional Resources Network; Program Evaluation Model; Student Evaluation Module; Facility Management; Curriculum Development and Competency-Based Instruction; and Vocational Programming for the a) Visually Impaired, b) Hearing Impaired/ Deaf, c) Specified Learning Disabled, d) Mentally Retarded, e) Emotionally Disturbed, f) Other Health Impaired, g) Speech Impaired, and h) Orthopedically Impaired.

HILLISON, John and HAGEE, Gale. "A Study to Determine Influencing Factors for Selecting Agricultural Education as a Profession." Staff Study, 1980, Virginia Tech, Blacksburg.

Purpose. The purpose of this study was to determine those factors influencing people to select agricultural education as their career choice. The nine influencing categories examined were: (1) pre-service student vs. teacher, (2) sex, (3) type of certification, (4) option area specilization, (5) type of major, (6) enrollment in vocational agriculture, (7) membership in FFA, (8) membership in undergraduate student organization and (9) age difference at time of decision.

Method. The sample consisted of 54 undergraduate students enrolled in agricultural education courses at Virginia Tech plus 200 randomly selected Virginia vocational agriculture teachers. A project designed instrument was used to collect data. The instrument was field tested with individuals not selected for the sample. The undergraduate students were administered the instrument during classtime. The teachers were mailed the instrument. Teachers completed and returned the instrument at a rate of 88.5%.

Findings. Among the more salient findings were: (1) Undergraduate students chose agricultural education as a profession for the same reasons contemporary teachers had, (2) Experiences in vocational agriculture were influential to students who had them, this was especially true of males, (3) Females chose agricultural education for primarily personal reasons such as a desire to work with young people, (4) Recruitment activities were generally not successful and (5) Undergraduate participation in the appropriate student organization such as Agricultural Education Society, Alpha Tau Alpha and Collegiate FFA encouraged a pro agricultural education career choice.

PARSONS, Ann. "The Evaluation of the Disadvantaged Option and Handicapped Program in Agricultural Education With Implications for Strengthening Pre-Service Teacher Education Programs." Undergraduate Honors Thesis, 1979, Virginia Tech, Blacksburg.

Purpose. The purpose of this study was to assess vocational agriculture teachers opinions of the skills needed to effectively work with the handicapped. Furthermore, the current undergraduate program was reviewed. The two final objectives were to revise the current recommended courses for the disadvantaged option and develop a course option for those who wish to specialize in the area of handicapped education.

Method. This study was an outgrowth of a larger study conducted with all vocational education review areas in Virginia. From a list of 57 statements addressing competencies needed by teachers to work with the handicapped, 27 statements were selected and agricultural teachers who work with handicapped were asked to indicate the importance of the competency and rate their effectiveness in using the competency. The undergraduate advising manual, 1979-80 Undergradute Catalogue, and personal interviews were conducted with specialist in education of the handicapped.

Findings. While all teachers work with special education in their schools, very few of the teachers coordinate their efforts with Special Education Teachers. The majority of handicapped students that agricultural teachers work with are the learning disabled and on the average, teachers identified about 36 percent of their pupils as handicapped. Teachers felt ineffective in four major areas of: 1) dealing with administrative and record-keeping duties; 2) utilizing appropriate materials and equipment; 3) involving local and state agencies which work with the disadvantaged and handicapped, and 4) coordinating education with available employment opportunities.

WILSON, Linda C. "A Profile of Female Agricultural Teachers in the Future Farmers of America Eastern Region and Their Job Satisfaction Level." Dissertation, 1980, Virginia Tech, Blacksburg.

Purpose. The primary purpose of this study was to develop a profile of the female agricultural teachers in the Future Farmers of America Eastern Region. The secondary purpose was to determine job satisfaction of the female agricultural teachers and the relationship of their job satisfaction to such characteristics as family background, education, current status, work experience, aspirations and advancement possibilities.

Method. Two questionnaires, the Profile Questionnaire and the Minnesota Satisfaction Questionnaire were used to collect the information from 167 teachers. Frequencies, means, standard deviations, ranges, percentages, Eta correlation, Pearson product-moment correlation and point biserial correlations were used to analyze the data and to determine the degree of relationship.

Findings. The findings of this study indicate the parents of the female agricultural teachers tend to have the same amount of education, tend to be in professional, managerial and technical occupations and tend to have minimal influence upon their daughter's occupational choice. The female agricultural teachers made the decision to teach agriculture at age 21 and were influenced mostly by college professors and high school teachers. Very few female agricultural teachers were enrolled in agriculture in high school, were FFA members or officers. The female agricultural teachers are teaching mostly horticulture, basic vocational agriculture and production agriculture. They are teaching an average of 25.2 hours per week and 49.5 students per day. Most of the female agricultural teachers do not aspire to a career teaching vocational agriculture but do aspire for additional education, and approximately one-half of the teachers would consider an administrative position, a community college position and/or a four-year college or university position. The female agricultural teachers tend to be more satisfied with their jobs if they have made the commitment to teach agriculture, if they received encouragement from their administrators to pursue additional education and experience, and if they feel they can compete successfully with men for promotions at their schools.

WASHINGTON

ZIMMER, Jack W. "Selected Methods of Forecasting Agricultural Employment Opportunities In Washington State." Staff study, 1980, Washington State University, Pullman.

Purpose. The purpose of the study was to develop a system to determine present and future employment opportunities for selected agriculture occupational titles.

Method. An employer survey was completed in thirteen randomly selected counties of Washington State to obtain baseline data for a minimum of 59 agricultural job titles secured from the National Agricultural Occupation Competency Study. A trained cadre gathered the employment data from a stratified random sample of 351 agricultural employers from within each selected county. Data obtained were used to establish 1978 agricultural employment levels and adjusted 1979 agricultural employment levels for the job selected. Data were manipulated through multiple regression analysis techniques to develop prediction equations for specific job titles and all of agriculture combined.

In addition a modified delphi process was completed based upon baseline data submitted to a stratified random sample of 80 agricultural leaders from the seven United States Office of Education taxonomy areas associated with agriculture. Their responses led to establishment of growth patterns for specific occupations and general occupational categories, lists of new/emerging job titles, and major factors affecting agricultural employment levels to the projected year of 1984.

Findings. It was determined that employment data could be obtained and employment projections could be made utilizing the employer survey and modified delphi technique. The results indicated that the agricultural mechanics category would have the largest growth rate by 1984. Little growth was demonstrated for production agriculture though it was determined to be a major employer of personnel by 1984. Export marketing manager, irrigation technician, and energy use technician were considered to be major new/emerging job titles. Export markets and sales, energy cost and availability, mechanization, prices, size of production units, and interest rates were determined to be major factors affecting future agricultural employment levels.

WEST VIRGINIA

KNOTTS, James Robert. "Compentencies Needed by Vocational Agriculture Wood Industry Graduates for Employment in Sawmill Operations." Master of Science Thesis, 1979, West Virginia University, Morgantown.

Purpose. The purpose of this study was to determine the competencies needed by wood industry graduates of vocational agriculture to become gainfully employed in the sawmill industry.

Method. Data for the study were collected by conducting an interview with the owner or manager of ten commercial sawmills in seven counties of the Eastern Panhandle of West Virginia.

Findings. Sawmill operators want employees trained in Vo-Ag wood industry programs and are willing to pay more for trained personnel. Trained employees remain with the operator longer than non-trained persons. Jobs are available for trained individuals and placement potential does exist for students eighteen years of age or older. Competencies expressed to be of most importance in sawmill operations are: follow and use safe work habits; remove debris from work areas to prevent accidents; know how to correctly use fire extinguishers; know who to notify in case of accident; know basic first-aid information and how to apply it; identify safety zones around mill equipment; install safety shields and devices on mill equipment; interpret safety symbols on mill equipment; properly operate a forklift; perform routine maintenance on forklift; demonstrate safety hazards and limitation of a forklift; inspect lumber trimmed at trimmer-saw; demonstrate safety in operating a trimmer-saw; operate a cut-off saw; perform routine maintenance on the cut-off saw; stack lumber according to dimension and type; properly select, use and repair hand tools; properly operate, sharpen and maintain a chainsaw; possess traits of good personal character; scale cut logs; grade hardwood and softwood logs; tally lumber by species, board feet, and grade; correctly sort and stack lumber according to grade; identify lumber defects occurring during drying.

LAWRENCE, Layle D. and Anthony T. MALLILO. "Identification of Specific Areas/Aspects of Vocational Agriculture Teaching in Need of the Greatest Improvement: A Delphi Approach." Staff Study, 1980, West Virginia University, Morgantown.

Purpose. This study was designed to identify specific areas/aspects of vocational agriculture teaching in need of the greatest improvement.

Method. Study data were obtained through the Delphi technique. Population for the study consisted of state supervisors of vocational agriculture, the head teacher educator of each state's major land-grant institution, and presidents of state vocational agriculture teachers associations. Participants were first asked to list the five areas or aspects of vocational agriculture teaching which, in their opinions, were in need of the greatest improvement. Responses were sorted and combined to formulate questionnaire statements. Questionnaires, listing the 57 statements identified, were mailed to the original population with a request to rate each statement as to need for improvement.

Findings. An overall mean score was derived for each item and items were lineally ranked. Group means, by position of the respondent and by NVATA region, were also determined. Recruitment and retention of competent instructors was perceived as the area of vocational agriculture teaching in need of the greatest improvement. Rated second, because of supervisor emphasis, was need for labor market information. Half the items appearing in the top twenty concerns pertained to supervised occupational experience programs and adult/young farmer education. Respondents indicated considerable need for improvement in quality, scope and diversity of experience programs and in frequency and effectiveness of supervision. Need for improvement in adult/young farmer education centered around program availability, compensation, and identification of adult needs. Participants also perceived considerable need for improvement in money matters, i.e., teacher salaries, compensation for adult work, and funding for equipment, supplies, travel and facilities.

MANNENTO, Joas E. "Major Problems Which Hinder the Adoption of Agricultural Innovations by Farmers as Perceived by State Extension Directors and County Agent Association Presidents." Master of Science Thesis, 1980, West Virginia University, Morgantown.

Purpose. The purpose of this study was to determine major problems which hinder the adoption of agricultural innovations by farmers.

Method. Data for the study were obtained through the Delphi technique. The study population included 50 state directors of CES and 49 presidents of CEAA. Participants were first asked to list the five major problems which, in their opinion, most seriously affect the adoption of agricultural innovations by farmers. Responses were sorted and combined to formulate questionnaire statements. Questionnaires, listing the 64 statements identified, were sent to the original population with a request to rate each statement as to its severity as a hindrance to adoption of agricultural innovations.

Findings. Eight of the 63 statements were rated as problems that seriously affect acceptance of innovations by farmers. There was nearly complete agreement between directors and presidents, and almost identical ratings were noted when responses were categorized by extension service regions.

Six of the eight statements related to economics. Perceived as major economic problems were high interest rates, inflated costs and low farm prices, high costs of land and equipment, energy costs, the shaky national economy, and pressure on land use in densely populated areas.

A political problem, increased government interference and regulation, was rated fifth by participants, whereas inadequacy of farm records, a managerial problem, was rated eighth.

STUDIES IN PROGRESS
1980-1981

ALABAMA

BAKER, Richard A. and TRUSSELL, S. Tracy. "Implementation of Performance Based Teacher Education into an On-going Vocational Teacher Education Program." Research and Development Grant, Auburn University, Auburn.

DRAKE, James Bob. "Utilization of Compressed Speech to Facilitate In-service Training of Vo-Ag Teachers." Staff Study, Auburn University, Auburn.

DRAKE, James Bob and STEWART, William. "Career Maturity Analysis of Alienated Youth." Staff Study, Auburn University, Auburn.

DRAKE, James Bob. "Utilization of Compressed Speech to Facilitate Training of Disadvantaged Youth." Staff Study, Auburn University, Auburn.

IVERSON, M. J. "The Effects of Field Application of MicroTeaching During Internship on the Achievement Level of Interns." School of Education Research Assistance Program Grant, Auburn University, Auburn.

IVERSON, M. J. "Factors Associated with Career Choice and Occupational Achievement of Teaching and Non-teaching Graduates in Agricultural Education at Auburn University." Staff Study, Auburn University, Auburn.

IVERSON, M. J. "A Study of Sexual Pressures in Southeastern Public Institutions and Agencies Concerned with Vocational-Technical Education." Staff Study, Auburn University, Auburn.

JOHNDROW, Jim. "Profile of Young and Adult Farmers Currently Enrolled in Young Farmer Programs in Alabama." Staff Study, Auburn University, Auburn.

FLORIDA

BEEMAN, Carl E. and BECKER, William J. "Status of Graduates From the Department of Agricultural and Extension Education." Staff Study, University of Florida, Gainesville.

BECKER, William J. and COLE, Jacquelyn M. "Reduction of Sex Stereotyping in Vocational Education Programs." Staff Study, University of Florida, Gainesville.

CARLTON, Kathleen D. "Perceptions of Master Gardeners Regarding Their Training and Effectiveness." Master of Science Thesis, University of Florida, Gainesville.

CHEEK, Jimmy G.; MCGHEE, M. B.; and COLE, Jacquelyn M. "Morale of First Year Teachers and Its Relationship to Selected Factors." Staff Study, University of Florida, Gainesville.

CHEEK, Jimmy G.; MCGHEE, M. B.; and COLE, Jacquelyn M. "Student-Teacher Morale and Its Relationship to Selected Factors." Staff Study, University of Florida, Gainesville.

CHEEK, Jimmy G.; MCGHEE, Max B.; and KACZOR, Coleen. "Assessment of Competencies Possessed by Students Completing Applied Principles of Agricultural Occupations." Staff Study, University of Florida, Gainesville.

COLE, Jacquelyn M. and CHEEK, Jimmy G. "Standards Requisite to Successful High School Agribusiness and Natural Resources Education Programs." Staff Study, University of Florida, Gainesville.

COLE, Jacquelyn M. and CHEEK, Jimmy G. "An Appraisal of Former Program Participants Satisfaction with the Competencies Developed as a Result of Participating in a High School Agribusiness and Natural Resources Education Program." Staff Study, University of Florida, Gainesville.

COLE, Jacquelyn M. "An Assessment of Competencies Needed by County Extension Directors." Staff Study, University of Florida, Gainesville.

COLE, Jacquelyn M. "An Assessment of Leadership Styles of Agents and Their Effectiveness in Working with Advisory Councils." Staff Study, University of Florida, Gainesville.

DAIRE, Mark L. "Assessment of Energy-Related Educational Needs of Florida's Commercial Fishermen." Master of Science Thesis, University of Florida, Gainesville.

FARRINGTON, Wm. S. and MCCALL, Thomas M. "Development of Student Achievement Measures for the Occupational Areas of Tractor Mechanics and Nursery Worker." Staff Study, University of Florida, Gainesville.

FARRINGTON, Wm. S. and SHEFFIELD, Cynthia L. "Telecommunication Energy Information Pilot Study." Staff Study, University of Florida, Gainesville.

FARRINGTON, Wm. S. "Teacher Profile, A Status Study of the Florida Vocational Agriculture Teacher." Staff Study, University of Florida, Gainesville.

FARRINGTON, Wm. S.; BEEMAN, Carl E.; and MCCALL, Thomas M. "Development of Student Achievement Measures for the Greenhouse Grower Occupational Area." Staff Study, University of Florida, Gainesville.

MCGHEE, Max B. "Factors Related to the Diffusion of Low Energy Technology by Professional Agricultural Workers." Staff Study, University of Florida, Gainesville.

MCGHEE, Max B.; CHEEK, Jimmy G.; and OSTERHOUT, Glenn. "Assessment of Competencies Possessed by Students Completing Fundamentals of Agricultural Occupations." Staff Study, University of Florida, Gainesville.

PAULSON, Curtis E. "Factors that Influence Florida Vocational Agricultural Students to Join or not Join the Future Farmers of America." Master of Science Thesis, University of Florida, Gainesville.

SHEFFIELD, Cynthia L. "Evaluation of a Local Extension Telecommunication Information System." Master of Science Thesis, University of Florida, Gainesville.

IDAHO

CRAWFORD, Terry L. "Development and Evaluation of a Guide for Administering Secondary Vocational Agriculture Programs in Idaho." Master of Science Thesis, University of Idaho, Moscow.

FOSTER, Richard M. and RIESENBERG, Louis E. "Evaluation of the Effectiveness of a Monthly Safety Packet on the Improvement of Safety Conditions and Safety Instruction in Idaho Vocational Agriculture Departments." Staff Study, University of Idaho, Moscow.

ILLINOIS

Southern Illinois University

COX, Sara J. "Critical Task of Agricultural Extension Advisors." Master of Science Thesis, Southern Illinois University, Carbondale.

FERTALY, Margaret. "Development of Production Agriculture Curriculum for CETA Trainees." Master of Science Thesis, Southern Illinois University, Carbondale.

GEORGE, Wendy A. "Evaluation of a Computer Based Farm Management Simulator." Master of Science Thesis, Southern Illinois University, Carbondale.

GRAY, Richard. "Determining Effective Strategies for Assisting the Development of Beginning Teachers of Vocational Agriculture." Doctor of Philosophy Dissertation, Southern Illinois University, Carbondale.

KUNYCKY, Neil. "Follow-Up Study of Southern Illinois University Aviation Graduates." Master of Science Thesis, Southern Illinois University, Carbondale.

MCCARTER, James. "Replications of a Study Comparing the Mailed Questionnaire and Personal Interview Methods of Data Collection for Curriculum Development in Occupational Education." Master of Science Thesis, Southern Illinois University, Carbondale.

MURRAY, Michael C. "An Analysis of the Follow-Up of CETA Agriculture Training at Southern Illinois University, Carbondale." Master of Science Thesis, Southern Illinois University, Carbondale.

NELSON, Alan G. "Verification of Illinois Standards for Use in the Public High School Evaluation." Master of Science Thesis, Southern Illinois University, Carbondale.

PATTON, Douglas E. "Development of the Forestry Class Curriculum in Agriculture Occupations Program in Hardin County High School." Master of Science Thesis, Southern Illinois University, Carbondale.

RENEAU, Fred W.; STITT, Thomas R.; LEGACY, James W.; and RICHARDS, Janise. "EPA - Agricultural Curriculum - Phase II." Staff Study, Southern Illinois University, Carbondale.

SAVKO, Teresa. "Determining the Effectiveness of Contests and Competition as a Teaching Method in the Vocational Horticulture Classroom." Master of Science Thesis, Southern Illinois University, Carbondale.

SENTEL, Les. "Identification of Factors Which Encourage Agriculture Education Graduates to Pursue Graduate Studies." Master of Science Thesis, Southern Illinois University, Carbondale.

SHAW, John. "Identification of International Career Opportunities for Agriculture Education Graduates." Master of Science Thesis, Southern Illinois University, Carbondale.

SMITH, Steve. "A Comparison of Discipline Attitudes of High School Agriculture Educators and Students to Common Classroom Discipline Problems." Master of Science Thesis, Southern Illinois University, Carbondale.

STITT, Thomas R.; EWING, Norma G.; WOOD, Eugene S.; RENEAU, Fred W. and MURRAY, Michael C. "Assessment and Program Planning Research Component for Model Program to Train Unemployed Youth and Young Adults in Agricultural Occupations Areas." Grant from the Department of Commerce and Community Affairs, Employment and Training Services Division, Governor's Grant Programs, State of Illinois, 1980-81, Southern Illinois University, Carbondale.

STITT, Thomas R. and WOOD, Eugene S. "CETA Agricultural Training at Southern Illinois University." Grant from the Illinois Farmer's Union, CETA, Balance of State, 1980-81, Southern Illinois University, Carbondale.

SWIGART, Amy. "A Model for Developing Competency Based Curriculum in Horticulture." Master of Science Thesis, Southern Illinois University, Carbondale.

VAHLKAMP, Denise L. "Evaluating the Need for Competency Based Instruction for Beginning Meat Processors." Master of Science Thesis, Southern Illinois University, Carbondale.

WHERRY, Ross. "Leadership Education Materials for Secondary Schools." Master of Science Thesis, Southern Illinois University, Carbondale.

University of Illinois

BENSON, Paul W. "Comparison of Affective Work Competencies and Selected Background Experiences of Students, Graduates, and Supervisors in Agricultural Mechanization." Doctor of Philosophy Dissertation, University of Illinois at Urbana-Champaign.

CRAWFORD, Cromwell. "An Analysis of the Role of Agricultural Education in Guyana's Development: Implications for Curriculum Change." Master of Science Thesis, University of Illinois at Urbana-Champaign.

ETHRIDGE, James I. "An Analysis of Demographic Variables and Their Relationships to Selected Teaching Activities of Agricultural Education Students and Graduates from Four Universities in Illinois." Doctor of Philosophy Dissertation, University of Illinois at Urbana-Champaign.

HARRIMAN, Clark Thomas. "An Analysis of Occupational Needs Assessment Procedures for Adult and Continuing Education Programs in Illinois Community Colleges." Doctor of Education Dissertation, University of Illinois at Urbana-Champaign.

HEMP, Paul E. and COURSON, Roger L. "Core Curriculum in Agriculture." Staff Study, University of Illinois at Urbana-Champaign.

NKAJIMEJE, Maxwell. "An Assessment of the Supply and Demand for Intermediate Level Agricultural Personnel in Northern Nigeria." Masters Thesis Equivalency, University of Illinois at Urbana-Champaign.

SWANSON, Burton E. "An International Study of National Agricultural Extension Organizations and Their Requirements for Trained Agricultural Personnel." Staff Study, University of Illinois at Urbana-Champaign.

TUCKER, Sonny W. "A Study of School Farm Laboratory Instructional Resources as Data Base for Improving Agricultural Science Programs of Secondary Schools in Sierra Leone." Doctor of Education Dissertation, University of Illinois at Urbana-Champaign.

WARNER, Richard E. "Factors Affecting the Adoption of Wildlife Conservation Practices by East-Central Illinois Farmers and Their Educational Implications." Doctor of Philosophy Dissertation, University of Illinois at Urbana-Champaign.

INDIANA

CHAMBERLAIN, Juliann. "An Assessment of the Function and Use of the Indiana Master Gardener Program." Masters Thesis, Purdue University, West Lafayette.

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HAMILTON, W. H. "Developing Learning Content for the Agricultural Mechanics Catalog." Staff Study, Purdue University, West Lafayette.

HOLT, Don and RICHARDSON, W. B. "An Intensive Course in Forage Crop Management for the PLATO System." Staff Study, Purdue University, West Lafayette.

PETERS, Jerry L. and MOORE, Gary E. "The Effects of Two Methods of Laboratory Teaching Experience on Students Morale and Teaching Performance." Staff Study, Purdue University, West Lafayette.

RICHARDSON, William B.; HAMILTON, W. H.; and KLEIN, Carmen. "Development of Performance Based Vocational Education Curriculum Materials for Vocational Agribusiness Programs." Staff Study, Purdue University, West Lafayette.

TORMOEHLEN, Roger. "Reducing Barriers to Handicapped Farm Operators and Farm Workers." Masters Thesis, Purdue University, West Lafayette.

IOWA

AIMAZAN, Isaias, Jr. "Adoption of Supervised Occupational Experience Curriculum Materials by Iowa Vocational Agriculture Teachers." Doctor of Philosophy Dissertation, Iowa State University, Ames.

ANYANWU, Alphonsus C. "Sources of Information and Patterns of Communication Between Scientist-Knowledge Creation and Knowledge Translation Micro-Systems." Doctor of Philosophy Dissertation, Iowa State University, Ames.

BERAN, John C. "The Value of Agricultural/Rural Development Training in the Rural Pastoral Ministry." Master of Science Thesis, Iowa State University, Ames.

CARTER, Richard I. "The Role of Youth Organizations for Students Interested in Agricultural Careers." Staff Study, Iowa State University, Ames.

EVERETT, Lawrence B. "Development and Evaluation of an In-Service Safety Education Program for Programs of Vocational Agriculture." Doctor of Philosophy Dissertation, Iowa State University, Ames.

FARD-SARHANGI, Ezatollah. "Analysis of Training Needs of Vocational Agriculture Teachers in Iowa." Doctor of Philosophy Dissertation, Iowa State University, Ames.

HARDT, Terry L. "Intrahousehold Factors Affecting Agricultural Development: A Study at Small Farms in Shaba, Zaire." Doctor of Philosophy Dissertation, Iowa State University, Ames.

HAYNES, Russell. "The Differential Effect of a Planned Supervised Occupational Experience Instructional Guide on Selected Work Values." Doctor of Philosophy Dissertation, Iowa State University, Ames.

HOSSEINI, Hossein. "Preservice Training Needs of Agricultural Extension Workers in Iowa." Doctor of Philosophy Dissertation, Iowa State University, Ames.

JIPP, Randall A. "Iowa High School Vocational Agriculture Seniors' Perceptions of Teaching Vocational Agriculture." Master of Science Thesis, Iowa State University, Ames.

KAHLER, Alan A. "Evaluation of the Effectiveness of Strategies for Structuring Agriculture and Agribusiness Education Programs in Iowa." Staff Study, Iowa State University, Ames.

KARNS, Christine D. "Relationship Between FFA Participation and Personal Development as Perceived by Iowa Agriculture Seniors." Doctor of Philosophy Dissertation, Iowa State University, Ames.

LIMBIRD, H. Martin. "Attitudes Toward Work-Experience Training of Foreign Students." Doctor of Philosophy Dissertation, Iowa State University, Ames.

MCCARTHY, David A. "Alternate Supervised Occupational Experience Programs in Use on Land and Livestock Laboratories in the States of Iowa, Kansas, Missouri, and Nebraska." Doctor of Philosophy Dissertation, Iowa State University, Ames.

MOELLER, Lonell L. "Distinguishing Characteristics of Iowa Vocational Agriculture Programs that Conduct Young Farmer Classes." Doctor of Philosophy Dissertation, Iowa State University, Ames.

MOORE, Susan F. "A Comparative Profile of Agricultural Education Programs and Their Administrative Functions in Land Grant and Non-Land Grant Universities in the United States." Doctor of Philosophy Dissertation, Iowa State University, Ames.

MORRIS, Carlton E. "A Study of the Relationship Between Vocational Agriculture Students' Self-Image and Selected Personal and Situational Variables." Doctor of Philosophy Dissertation, Iowa State University, Ames.

NOMEIR, Said. "Viewing Habits and Preferences of Farm Operators for Televised Agriculture Programs." Doctor of Philosophy Dissertation, Iowa State University, Ames.

NWOZUZU, Emmanuel I. "Administrative Factors that Affect the Adoption of Curriculum Changes in Agricultural Education." Master of Science Thesis, Iowa State University, Ames.

OLARICKACHARD, Paranee. "The Role of the National Swine Research and Training Center in Developing Swine Production in Thailand." Doctor of Philosophy Dissertation, Iowa State University, Ames.

POLAND, Suzanne M. "A Study of Variations and Performance Among Students of Differing Backgrounds Within the Tillage and Seeding Unit of Agronomy 114, An Introductory Crop Production Course." Master of Science Thesis, Iowa State University, Ames.

ROLLENHAGEN, Rosalie B. "The Feasibility of Establishing and Managing a Small Apple Orchard and Strawberry Farm in Iowa." Master of Science Thesis, Iowa State University, Ames.

RUFF, Edmund F., III. "Characteristics of Iowa Young Farm Operators Engaged in Farming as Single Proprietors." Master of Science Thesis, Iowa State University, Ames.

RUTACHOKOZIBWA, Vedasto. "Perception of School Land Laboratories in Iowa as an Educational Tool in Teaching Vocational Agriculture with Implications for Tanzania School Farms." Master of Science Thesis, Iowa State University, Ames.

SHORTER, George S. "Effectiveness of Instructional Packet on Supervised Occupational Experience Programs as Evaluated by Economic Worth of Iowa Vocational Agriculture Students." Doctor of Philosophy Dissertation, Iowa State University, Ames.

SMITH, Mack W. "Perceptions of Selected Groups Toward the Study of Agricultural Concepts in the Iowa High School Curricula." Doctor of Philosophy Dissertation, Iowa State University, Ames.

TOWNSEND, Joe D. "An Experimental Evaluation of an Instructional Packet on FFA and Leadership for Beginning Vocational Agriculture Students in Iowa." Doctor of Philosophy Dissertation, Iowa State University, Ames.

WILLIAMS, David L. "An Experimental Evaluation of an Agribusiness Placement Experience Management Model for Vocational Agriculture Students in Iowa." Staff Study, Iowa State University, Ames.

LOUISIANA

BUDDLE, Donald A. "Cooperative Relationships Between County Extension Agents and Vocational Agriculture Teachers in Louisiana." Doctor of Philosophy Dissertation, Louisiana State University, Baton Rouge.

KOTRLIK, Joe W. "Follow-up of Vocational Agricultural Education Graduates and Evaluation of Their Training." Staff Study, Louisiana State University, Baton Rouge.

KOTRLIK, Joe W. "The Effective Use of Adult Programs, Occupational Experience Programs, and Advisory Committees in High School Vocational Agriculture/Agribusiness Programs." Staff Study, Louisiana State University, Baton Rouge.

MCCULLY, James S., Jr. "Comparison of Individualized Instruction and Group Instruction Methods in Basic Vocational Agriculture Classes." Doctor of Philosophy Dissertation, Louisiana State University, Baton Rouge.

SALADAGA, Fe S. "Professional Competencies Needed, Levels Attained, and Training Sources as Perceived by Vocational Agriculture Teachers." Doctor of Philosophy Dissertation, Louisiana State University, Baton Rouge.

SMITH, Charles W. "Updating Teaching Materials for Education in Vocational Agriculture." Staff Study, Louisiana State University, Baton Rouge.

SMITH, Charles W. and BURNETT, Michael F. "Selected Characteristics of Secondary Vocational Horticulture Programs in Each of the Four FFA Regions." Staff Study, Louisiana State University, Baton Rouge.

MARYLAND

ARRINGTON, Richard D., III.; COOPER, Elmer L.; and NELSON, Clifford L. "Relationships Between Selected Factors in Vocational Education in Agriculture Programs and FFA Membership Trends." Maryland Agricultural Experiment Station, T-29, University of Maryland, College Park.

COOPER, Elmer L. "An Evaluation of Agricultural Instruction in Elementary Schools of Maryland." Staff Study, University of Maryland, College Park.

COOPER, Elmer L. and NELSON, Clifford L. "Authorship Assignment for Research and Publication in Agricultural Education." Staff Study, University of Maryland, College Park.

LUDWIG, Pamela. "Standards for Quality Programs in Agriculture/Agribusiness in Maryland." Master of Science Thesis, University of Maryland, College Park.

NELSON, Clifford L. "Analysis of Communication Behaviors of the Publics of the Maryland Agricultural Experiment Station." Maryland Agricultural Experiment Station, T-28, University of Maryland, College Park.

RIGGS, Larry. "A Comparison of Vo-Ag Programs With Gold Emblem FFA Chapters and Those Without FFA Chapters." Masters of Science Thesis, University of Maryland, College Park.

YEISER, Gail P. and COOPER, Elmer L. "An Assessment of Job Opportunities in Agriculture in Maryland and The Implications for Adult Education." Staff Study, University of Maryland, College Park.

MINNESOTA

BARK, Dale R. "Extent of Involvement With and Expressed Attitudes Toward Livestock Shows by Minnesota High School Vocational Agriculture Instructors." Masters Study, University of Minnesota, St. Paul.

INGVALSON, Brian. "An Evaluation of A Classroom Instructional Unit on Supervised Occupational Experience for Beginning Vocational Agriculture Students." Ph.D. Dissertation, University of Minnesota, St. Paul.

OGUNBAMERU, Bankole. "Model for Determining the Utility of Self-Assessed Competencies in Predicting Economic Success in Dairy Enterprise Management." Ph.D. Dissertation, University of Minnesota, St. Paul.

PEEPLE, Delan. "Agricultural Mechanics Building and Facilities Competencies Used in North Central Minnesota." Masters Study, University of Minnesota, St. Paul.

PETERSON, Roland and THOMAS, Ruth. "An Assessment of the Impact of Alternative Patterns for Delivering Vocational Agricultural and Home Economics Instruction on Rural Community Development and Youth, and the Development of Guidelines for Use in Choosing and Planning Vocational Program Systems." Staff Study, University of Minnesota, St. Paul.

SCHIPULL, Martin A. "A Comparison of Metals and Welding Courses Taught in Selected Upper Midwest Post Secondary Institutions." Master of Education Integrating Paper, University of Minnesota, St. Paul.

WARNER, James. "A Study of the Relationship of Tuition Charged for Adult Farm Business Management Programs in the State of Minnesota and Enrollment in These Programs." Masters Study, University of Minnesota, St. Paul.

MISSISSIPPI

BYLER, Ben L. "A Study of the Diffusion and Adoption of Selected Agricultural Technology in Mississippi." Staff Study, Mississippi State University, Mississippi State.

BYLER, Ben L. "A Study of the Factors Related to Student Teacher Morale Before and After Student Teaching." Staff Study, Mississippi State University, Mississippi State.

BROWN, Ronald A. "Employer Perceptions of the Influence of Vocational Agriculture on Program Completers in Mississippi." Staff Study, Mississippi State University, Mississippi State.

MCKEE, Veronica. "Perceptions of Male County-Level MCES Employees Regarding Dress Habits and Their Influence on Program Success." Master of Science Thesis, Mississippi State University, Mississippi State.

SULLIVAN, Gail. "Opinions of Vocational Agriculture Students in Mississippi Regarding FFA Membership." Master of Science Thesis, Mississippi State University, Mississippi State.

MONTANA

AMBERSON, Max L. "Characteristics Associated with Successful Hiring Practices of Full Time Agricultural Workers in Montana." Staff Study with Montana Agricultural Experiment Station, Montana State University, Bozeman.

VENNES, Martin L. "Problems Encountered by Montana School Administrators in Administering Vocational Education Programs at the District Level." Master of Science Professional Paper, Montana State University, Bozeman.

NEBRASKA

DILLON, Roy D. "An Assessment of Time Utilization by Agricultural Educators, Use of Advisory Councils, and the Nebraska Core Curriculum in Nebraska." Staff Study, University of Nebraska, Lincoln.

GILBERTSON, O. S. "Vocational Agricultural and Home Economics Education Programs in Rural and Multi-District Schools." Staff Study, University of Nebraska, Lincoln.

HORNER, James T. "An Assessment of the Nebraska Vocational Agriculture Core Curriculum." Staff Study, University of Nebraska, Lincoln.

HORNER, James T. "An Appraisal of Innovative Approaches to Leadership Education/Action for Rural Community Resource Development." Staff Study, University of Nebraska, Lincoln.

NEW YORK

BERKEY, Arthur L. and DRAKE, William E. "Research and Development for Competency Based Teacher Education in Agriculture." Staff Study, Cornell University, Ithaca.

BERKEY, Arthur L.; DRAKE, William E.; and TENNEY, Richard W. "Collection, Analysis, and Dissemination of Employment Demand Data for Agriculture/Agribusiness in New York State." Staff Study, Cornell University, Ithaca.

SMITH, William. "A Conceptual Model in Agricultural Education for Secondary Schools in Jamaica." M.S. Thesis, Cornell University, Ithaca.

TENNEY, Richard W. "Professional Follow-Up - Student Teachers: Facts and Information on Agricultural Education in New York State." Staff Study, Cornell University, Ithaca.

WANDIL, Michael. "Identification of Instructional Materials Needs and Development of Procedural Model for Development and Selection of Materials for Agricultural Colleges in Papua New Guinea." Master of Science Thesis, Cornell University, Ithaca.

NORTH DAKOTA

BACKLUND, Paul, A. "Assessment of Selected Curriculum Units in North Dakota Vocational Agriculture Programs." Master of Science Paper, North Dakota State University, Fargo.

CLARK, Glenolin W. "North Dakota Agribusiness Employment Opportunities and Training Needs Within Selected Agribusiness Industries and Professions." Master of Science Paper, North Dakota State University, Fargo.

DEBERTIN, Richard H. "Job Satisfaction Among North Dakota Secondary Vocational Agriculture Instructors." Master of Science Paper, North Dakota State University, Fargo.

LINK, Harvey J. "Attitudes of North Dakota Vocational Agriculture Instructors Toward Their Professional Vocational Organizations." Master of Science Paper, North Dakota State University, Fargo.

WARNER, Lyle B. "Reasons Why Students Did Not Complete Two-Year Post-Secondary Farm Management Programs in North Dakota." Master of Science Paper, North Dakota State University, Fargo.

WILLARDSEN, Ronald L. "Attitudes of North Dakota School Administrators Toward Supervised Occupational Experience Programs in Vocational Agriculture/Agribusiness Education." Master of Science Paper, North Dakota State University, Fargo.

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ALNASSAR, Saleh N. "Professional Job Knowledge and Skills Needed by Extension Personnel in the Central Region of Saudi Arabia." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

ARRINGTON, Larry. "Summer Programs of Vocational Agriculture and Effectiveness of the FFA Chapter and Student Supervised Occupational Experiences." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

BOUCHER, Leon. "An Analysis of Professional Performance Activities of Student Teachers in Agricultural Education 1980-81." Staff Study, The Ohio State University, Columbus.

BOUCHER, Leon. "The Identification of a Teacher Profile Associated with Teacher Performance in Vocational Agriculture in Ohio." Staff Study, The Ohio State University, Columbus.

CLARK, Charles D. "An Analysis of the Influence of Job Satisfaction, Work Values, and Perceived Job Alternatives on the Turnover of County Extension Agents." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

GUILER, Gilbert S. "Perceived Needs of First Year Certified Teachers as Compared with Those First Year Teachers Who Do Not Hold Degrees." Staff Study, The Ohio State University, Columbus.

HEDGES, Lowell; LADEWIG, Howard; and BARRICK, Kirby. "Needs Assessment for In-Service Education." Staff Study, The Ohio State University, Columbus.

HERRON, Clifford. "Factors Related to Satisfaction with and Quality of Housing in a Rural Ohio County." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

HILLIKER, Alden. "The Orientation of Beginning County Extension Agents." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

MCCRACKEN, J. David. "Occupational Analysis of Selected Positions in Agribusiness." Staff Study, The Ohio State University, Columbus.

MCCRACKEN, J. David. "Research Issues in Agricultural Education." Staff Study, The Ohio State University, Columbus.

MCCRACKEN, J. David. "Review of Research in Agricultural Education." Staff Study, The Ohio State University, Columbus.

MCCRACKEN, J. David. "Subject Matter and Occupational Experience in the Under-Graduate Agricultural Curriculum." Staff Study, The Ohio State University, Columbus.

MOKMA, Arnold L. "Program Evaluation/Review Process for Technical Education." Staff Study, The Ohio State University, Wooster.

OSBORNE, Edward W. "Requirements of Masters Degree Candidates in the Non-Thesis Option in Agricultural Education in the United States." Staff Study, The Ohio State University, Columbus.

PONCE, Eliseo R. "Factors Associated with Income, Technology Adoption, and Participation of Samahang Nayon Members, Leyte, Phillippines." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

SMITH, Keith. "Iowa Agriculture Instructors' Perceptions of In-Service Programs in Ohio." Staff Study, The Ohio State University, Columbus.

SUTPHIN, H. Dean. "The Identification of Priority Issues in Agricultural Education." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

WELCH, Antoinette. "The Readability of Curriculum Materials Used by Vocational Horticulture Teachers in Ohio." Doctor of Philosophy Dissertation, The Ohio State University, Columbus.

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DAYRIT, Ruben S. "The Development of a Data-Base for an Agricultural Education Program for the College of Micronesia." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

FINLEY, George E. "The Identification and Validation of Essential Technical Agriculture Competencies for Teachers of Vocational Agriculture in Oklahoma." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

FORSYTHE, Steven W. "An Assessment of Agricultural Mechanics Safety Instruction Conducted at Agriculture Teacher Education Programs Across the United States." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

GOLLIVER, John S. "Expectations of Vocational Agriculture by Citizens of the Agra Community." Master of Science Report, Oklahoma State University, Stillwater.

KEY, James P. and FINLEY, George E. "The Assessment of the Impact of the Integrated Pest Management Program in a Four County Area of Oklahoma." Staff Study, Oklahoma State University, Stillwater.

LESSLY, Roy R. "County Extension Agricultural Agents' Perceptions of Competencies as Bases for In-Service Education Programs in Oklahoma." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

RANDLE, Thomas E. "The Perception of Selected Individuals in Oklahoma Towards the Instructional Function of the Oklahoma State University Division of Agriculture." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

WILLIAMS, Randall H. "Teacher Administrator Utilization of Recommended Guidelines for Summer Vo-Ag Programs in Area I of Texas." Doctor of Education Dissertation, Oklahoma State University, Stillwater.

YORAMA, Moses Tombari. "A Comparative Study of Dairying in the Niger Delta Area of Nigeria and the Tropical Areas of the U. S. of America." Master of Science Report, Oklahoma State University, Stillwater.

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DENOBLE, Donna M. "The Effect of an Inservice Workshop in Tractor Maintenance on the Learning of Pennsylvania Beginning Teachers and Their Students." Master of Science Thesis, The Pennsylvania State University, University Park.

EASTER, Glen W. 'Determining the Need for Two-Year Post Secondary Vocational Programs in Production Agriculture." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

FERRY, Earl W. "The Effects of a Unit of Instruction in Energy on Attitudes Toward Energy Conservation Implementation, and Energy Saved." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

GAY, Thomas S. "Revision of the Pennsylvania Wildlife Record Book." Master of Education Paper, The Pennsylvania State University, University Park.

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HOWE, James D. "Salaries and Working Conditions of Pennsylvania Vocational Agriculture Teachers." Master of Education Paper, The Pennsylvania State University, University Park.

MCCOY, James S. "Evaluation of Commercial Feed Rations for Feeding Chicken Partridges in Confinement." Master of Science Thesis, The Pennsylvania State University, University Park.

MAKIN, Richard C. "Competency Levels in Agricultural Mechanics for Preservice and Inservice Teachers of Vocational Horticulture in Pennsylvania." Master of Science Thesis, The Pennsylvania State University, University Park.

MARTIN, Robert. "Implications of Selected Supervisory Techniques to Success of Beginning Teachers of Agriculture." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

MINCEMOYER, Donald L. "Impact of Inservice Education on Curricular Changes in Local Schools." Doctor of Education Dissertation, The Pennsylvania State University, University Park.

SEDLAK, Michael A. "A Survey of Educational Greenhouses in Pennsylvania." Master of Science Thesis, The Pennsylvania State University, University Park.

SHORT, Elizabeth. "Evaluation of a Foliage Slide Series and Student Manual." Master of Science Thesis, The Pennsylvania State University, University Park.

THOMPSON, Dale. "Perceptions of Selected School Personnel Regarding Vocational Youth Organizations." Doctor of Philosophy Dissertation, The Pennsylvania State University, University Park.

TEXAS

CHRISTIANSEN, James E. "Factors Influencing Teachers of Vocational Agriculture in Texas to Remain in or to Leave the Teaching Profession." Staff Study, Texas A & M University, College Station.

UTAH

EKPE, Ekpeni. "Some Effects of Crossbreeding on Reproduction and Production Performance of Meat-type Goats and Their Use in Production Programs in Nigeria." Master of Science Thesis, Utah State University, Logan.

JENSEN, Jim C. "An Assessment of Utah Farm Machinery Dealers' Manpower Needs and A Comparison of National and Local Dealer Employment Criteria." Master of Science Thesis, Utah State University, Logan.

WILLIAMS, N. Wesley. "4-H Club Members' and Parents' Perceptions of Life and Animal Skills Gained Through Youth Involvement with Their Animal Project Programs." Master of Science Thesis, Utah State University, Logan.

VIRGINIA

CLOUSE, James P. and MILES, Johnnie H. "Improving Vocational Guidance and Counseling for Adults." Funded by The State Department of Vocational Education, Virginia Tech, Blacksburg.

CLOUSE, James P. "The Status of Preservice Preparation Training Programs Concerning Vocational Advisory Councils and The Preparation of Teachers and Administrators to Work With Such Councils." Staff Study, Virginia Tech, Blacksburg.

CLOUSE, James P. "The Development of Instructional Materials for Agricultural Education for 1980-81." Funded by The State Department of Vocational Education, Virginia Tech, Blacksburg.

HILLISON, John. "An Analysis of Verbal and Nonverbal Communication on Teaching Effectiveness." Staff Study, Virginia Tech, Blacksburg.

TURNER, Clinton V. "A Systematic Procedure Determining In-Service Educational Needs of Agricultural Education Teachers and Agricultural Extension Agents in Virginia." Doctor of Education Dissertation, Virginia Tech, Blacksburg.

WEST VIRGINIA

REASER, William. "Values to be Derived from Pre-Vocational Education as Perceived by Students Currently Enrolled at Pleasants, Ritchie and Tyler Vocational School." Masters Thesis, West Virginia University, Morgantown.

SHRIVER, Mary E. "A Study to Determine Effectiveness of the Curriculum Guide, 'Exploring Agribusiness and Natural Resources,' in Attitudinal and Career Awareness Changes." Masters Thesis, West Virginia University, Morgantown.

SMITH, Barbara J. "To Determine the Potential for Servicing the Handicapped Through Mainstreaming as Perceived by Teachers of Vocational Agriculture." Masters Thesis, West Virginia University, Morgantown.

STUMP, Linda C. "Values to be Derived from Hortitherapy when Used with Handicapped Students as Perceived by Teachers of Vocational Agriculture." Masters Thesis, West Virginia University, Morgantown.

YOKUM, John. "Perceived Attitudes of Vocational Agriculture Students' Parents Toward the Vocational Agriculture Programs in Jefferson and Berkeley Counties of West Virginia." Masters Thesis, West Virginia University, Morgantown.

WASHINGTON

HOLMES, W. Lee; CVANCARA, J. G.; and KLEENE, M. D. "Increasing the Effectiveness of Urban/Suburban Vocational Agriculture Programs in Recruiting, Preparing, and Placing Students." Staff Study, Washington State University, Pullman.

SUBJECT INDEX

SUMMARIES OF RESEARCH AND DEVELOPMENT ACTIVITIES IN AGRICULTURAL EDUCATION, 1979-80

Administration — Page

Barrick, R. K., Jr.; Ohio 59
Elliot, D. L.; Ohio 62
Mullen, S. R.; Ohio 75

Adult Farmer Education

Azar, M.; Minnesota 36
Buckley, M. W.; Mississippi 42
Carlson, L. L.; Minnesota 37
Dorn, D. K.; Virginia 111
Glesne, C. E.; Illinois 18
Hanoody, A. J. Y.; Ohio 63
Mannento, J. E.; West Virginia. 121
Massie, C. M.; Maryland 33
Murphy, D. J.; Pennsylvania 102
Oparaugo, S. M. C.; Iowa. 29
Riesenberg, L. E.; Minnesota. 40
Schams, D. A.; Minnesota. 40
Seibel, R. J. and Pfister, J. A.; Maryland. 35
Smith, K. L.; Iowa. 30
Starling, J. T.; Ohio 87
Stenzel, K. R.; Minnesota 42
Townsend, G. A.; Iowa 31
Whiteman, L. D.; New York 53

Advisory Councils

Abd-Rahman, Z. E.; Ohio 57
Dillon, R. D.; Nebraska 48
Ramsini, W.; Ohio 82

Agribusiness

Burnett, M. F.; Ohio 62
Cockrum, R.; Ohio 91
Gray, R.; Illinois. 16
Migler, J. R.; North Dakota 54
Mortensen, J. C.; Idaho 13
Rheault, K. W.; North Dakota. 55

Subject Index - continued

Agricultural Mechanics Page

Azrag, E. E.; Ohio 57
Bach, F. W.; New York 49
Buriak, P.; Pennsylvania 97
Burke, S. R.; Missouri 43
Carr, B.; Missouri 44
Darcey, C. L.; Oklahoma 92
Dunn, D. R.; Virginia 111
Ferry, E. W.; Pennsylvania 97
Genereux, D. G.; Colorado 4
Hamilton, W. H.; Indiana 25
Heimgartner, D. C.; Idaho 12
Peuse, H. G.; Illinois 20
Raoufi, B.; Oklahoma 94
Schroeder, D. L.; Minnesota 41
Zurbrick, P. R. and Cox, D. E.; Arizona 3

Agricultural Occupations

Kapral, R. L.; New York 51
Legacy, J. W.; Illinois 17
Zimmer, J. W.; Washington 119

Agricultural Policy

Smith, G. D.; Montana 48

Animal Science

Aghazadeh-Attari, A.; Oklahoma 89
Amen, K. E.; Colorado 3
Johnson, R.; Illinois 16
Lee, C. A.; Ohio 73
Thomas, L. G.; Colorado 5
Yoakum, H. M.; Oklahoma 95

Audiovisual Aids

Hamilton, W. H.; Indiana 25
Kowsary, M.; Utah 109
Walker, K. A.; Pennsylvania 106

Subject Index - continued

Career Development Page

Hillison, J. and Hagee, G.; Virginia . . . 117
Kapral, R. L.; New York . . . 51
Knight, J.; Ohio . . . 70
Miller, W. W.; Texas . . . 107
Ogbazi, J. N.; Iowa . . . 29

Competencies

Ambrosia, J.; Illinois . . . 15
Amen, K. E.; Colorado . . . 3
Attarian, A. R.; Pennsylvania . . . 96
Azrag, E. E.; Ohio . . . 57
Azar, M.; Minnesota . . . 36
Bellard, V. I.; New York . . . 49
Buriak, P.; Pennsylvania . . . 97
Camp, W. G.; Indiana . . . 22
Clark, D. A.; Georgia . . . 10
Cushman, H. R.; New York . . . 50
Genereux, D. G.; Colorado . . . 4
Gott, R. E.; Missouri . . . 46
Gray, R.; Illinois . . . 16
Hamilton, W. H.; Indiana . . . 25
Hamilton, W. H.; Indiana . . . 25
Israelsen, C. E.; Utah . . . 108
Knotts, J. R.; West Virginia . . . 120
Legacy, J. W.; Illinois . . . 17
Lighari, A. L.; Missouri . . . 47
Metala, S. O.; Pennsylvania . . . 101
Romig, R. L.; Ohio . . . 83
Schroeder, D. L.; Minnesota . . . 41
Stenzel, K. R.; Minnesota . . . 42
Summers, J. O.; Utah . . . 110
Teh, S. B.; Iowa . . . 30
Thomas, L. G.; Colorado . . . 5
Weaver, T. C.; Georgia . . . 11
Zurbrick, P. R. and Cox, D. E.; Arizona . . . 3

Curriculum

Camp, W. G.; Indiana . . . 22
Clouse, J. P.; Virginia . . . 116
Crowder, J.; Colorado . . . 4
Curry, T. L.; Florida . . . 9
Cushman, H. R.; New York . . . 50

Subject Index - continued

Curriculum - continued   Page

Gray, R.; Illinois 16
Hamilton, W. H.; Indiana 24
Hamilton, W. H.; Indiana 25
Heimgartner, D. C.; Idaho 12
Legacy, J. W.; Illinois 17
Orthel, G. R.; Idaho 14
Reneau, F. W., Stitt, T. R. and Legacy, J. W.; Illinois 17
Schroeder, D. L.; Minnesota 41

Decision Making

Buckley, M. W.; Mississippi 42
Karns, C. D.; Ohio 69
Ogbazi, J. N.; Iowa 29
Ries, A. E.; Ohio 83

Economics

Mannebach, A. J. and Kline, W. D.; Connecticut 7
Trede, L. D.: Iowa 32

Educational Needs

Attarian, A. R.; Pennsylvania 96
Bellard, V. I.; New York 49
Jahi, A.; Ohio 68
Seibel, R. J. and Pfister, J. A.; Maryland 35
Sunderland, P. L.; Idaho 15
Wongsamun, C.; North Dakota 56
Yoakum, H. M.; Oklahoma 95

Employment

Migler, J. R.; North Dakota 54
Rheault, K. W.; North Dakota 55
Sands, C., Swanson, B. E. and Herbst, J. H.; Illinois 21
Zimmer, J. W.; Washington 119

Environmental Education

Stager, K. J.; Minnesota 41

Subject Index - continued

Evaluation

	Page
Barrett, J. D.; Ohio	58
Carlson, L. L.; Minnesota	37
Connolly, C. L.; Iowa	27
Crowder, J.; Colorado	4
Curry, T. L.; Florida	9
Hemp, P. E. and Swanson, B. E.; Illinois	19
Henderson, J. L.; Ohio	67
Holley, C. W., III; Oklahoma	92
Iverson, M. J. and Spencer, C.; Alabama	1
Jones, J. W., Jr.; Iowa	28
Kantner, D. L.; Pennsylvania	100
KcKinney, J. C.; Virginia	113
Orthel, G. R.; Idaho	14
Parmley, J. D.; Ohio	76
Parsons, A.; Virginia	118
Reece, D. H.; Oklahoma	94
Rhodes, K. B.; Pennsylvania	103
Scanlon, D. C.; Ohio	85
Torres, F. R.; Iowa	31
Trede, L. D.; Iowa	32

Extension

Abuan, L. S.; Minnesota	36
Aghazadeh-Attari, A.; Oklahoma	89
Barrett, J. D.; Ohio	58
Burkett, M. S.; Ohio	60
Cosner, B. L.; Oklahoma	91
Elliott, D. L.; Ohio	62
Harrison, F., Jr.; Ohio	65
Jackson, P. R.; Oklahoma	92
Jahi, A.; Ohio	68
Kantner, D. L.; Pennsylvania	100
Kittrell, D. L.; Ohio	69
Kosoko, O.; Ohio	71
Larkin, W. D.; Ohio	72
Ledesma-Schouwe, R. A.; Texas	107
Mannento, J. E.; West Virginia	121
Mullen, C. S.; Ohio	75
Mullen, C. S.; Ohio	75
Poole, A. T.; Ohio	81
Ramsini, W.; Ohio	82
Scheneman, C. S.; Ohio	86
Smith, C. J.; Illinois	22
Sunderland, P. L.; Idaho	15
Wongsamun, C.; North Dakota	56

Extension Programs Page

Lindeman, A. K.; Ohio . . . 74
Stager, K. J.; Minnesota . . . 41
Strickler, P. F.; Pennsylvania . . . 105
Torres, F. R.; Iowa . . . 31

FFA

Cunningham, B. E.; New York . . . 50
Damann, A. S.; Virginia . . . 116
Ferry, E. W.; Pennsylvania . . . 97
Henderson, J. L.; Ohio . . . 67
Kim, S. S.; Minnesota . . . 38
Maxwell, K. M.; Maryland . . . 35
Meeks, L. A.; Oklahoma . . . 93
Pickard, R. D.; Ohio . . . 80
Walker, K. A.; Pennsylvania . . . 106

Facilities

Everett, L. B.; Iowa . . . 28
Godfrey, D. W.; Montana . . . 47
Hanson, D. L.; Minnesota . . . 37
Kosel, B. J.; Minnesota . . . 39

Follow-Up Studies

Castle, E. M.; Oklahoma . . . 90
Darcey, C. L.; Oklahoma . . . 92
Iverson, M. J. and Spencer, C.; Alabama . . . 1
Johnson, A. B., Jr.; Oklahoma . . . 93
Lambreth, E. E. and Griffin, S. A.; Tennessee . . . 106
Miller, W. W.; Texas . . . 107
Mortensen, J. C.; Idaho . . . 13
Oparaugo, S. M. C.; Iowa . . . 29
Smith, K. L.; Iowa . . . 30
Watkins, J. E.; Ohio . . . 87

4-H

Barrett, J. D.; Ohio . . . 58
Burkett, M. S.; Ohio . . . 60
Elliott, D. L.; Ohio . . . 62
Larkin, W. D.; Ohio . . . 72

4-H - continued Page

Mullen, C. S.; Ohio . . . 75
Reed, K. B.; Virginia . . . 113
Scheneman, C. S.; Ohio . . . 86
Sunderland, P. L.; Idaho . . . 15
Travis, D. B.; Virginia . . . 114
Wongsamun, C.; North Dakota . . . 56

Handicapped Students

Camp, W. G.; Indiana . . . 22
Crunkilton, J. R., McGough, R. and Poplin, P.; Virginia . . . 116
Dunn, D. R.; Virginia . . . 111
Heilman, J. M.; Ohio . . . 66
Iverson, M. J. and Davis, P. D.; Alabama . . . 1
Mack, G. L.; North Dakota . . . 54
Norman, T. E.; Minnesota . . . 39
Parsons, A.; Virginia . . . 118
White, B.; Virginia . . . 115

Horticulture

Attarian, A. R.; Pennsylvania . . . 96
Curry, T. L.; Florida . . . 9
Godfrey, D. W.; Montana . . . 47
Haffey, T. L.; Pennsylvania . . . 98
Hanson, D. L.; Minnesota . . . 37
Karns, C. D.; Ohio . . . 69
Parmley, J. D.; Ohio . . . 76
Scanlon, D. C.; Ohio . . . 85
Schempp, S. A. S.; New York . . . 53
Smith, C. W.; Louisiana . . . 33

Inservice Education

Eaves, C. W.; Georgia . . . 11
Goode, J. K.; Missouri . . . 45
Hamilton, W. H.; Indiana . . . 24
Harmon, H. L.; Ohio . . . 64
Iverson, M. J. and Davis, P. D.; Alabama . . . 1
Kyros, W.; New York . . . 52
Smith, S. C.; Oklahoma . . . 95

Instructional Materials

Bach, F. W.; New York . . . 49
Clouse, J. P.; Virginia . . . 116

Instructional Materials - continued Page

Connolly, C. L.; Iowa 27
Crunkilton, J. R., McGough, R. and Poplin, P.; Virginia 116
Haffey, T. L.; Pennsylvania 98
Hamilton, W. H.; Indiana. 25
Hamilton, W. H.; Indiana. 25
Jones, J. W., Jr.; Iowa 28
Kowsary, M.; Utah 109
Reneau, F. W., Stitt, T. R. and Legacy, J. W.; Illinois 17
Rhodes, K. B.; Pennsylvania 103
Scanlon, D. C.; Ohio. 85
Schempp, S. A. S.; New York 53
Stitt, T. R., Legacy, J. W., Reneau, F. W. and Benton, R. A.;
Illinois 17
Walker, K. A.; Pennsylvania 106

International Education

Abuan, L. S.; Minnesota 36
Aghazadeh-Attari, A.; Oklahoma. 89
Ben Dhifallah, M.; Oklahoma 89
Choudhury, A. K. M. F.; Oklahoma. 90
Connolly, C. L.; Iowa 27
Cushman, H. R.; New York. 50
Hanoody, A. J. Y.; Ohio 63
Jackson, P. R.; Oklahoma. 92
Kowsary, M.; Utah 109
Ledesma-Schouwe, R. A.; Texas 107
Metalá, S. O.; Pennsylvania 101
Peuse, H. E.; Illinois. 20
Raoufi, B.; Oklahoma. 94
Riley, D. J.; Oklahoma. 94
Smith, C. J.; Illinois. 22

Internship

Kirts, C. A. and Claycomb, D. M.; Missouri. 46

Leadership

Larkin, W. D.; Ohio 72
Sunderland, P. L.; Idaho. 15
Townsend, G. A.; Iowa 31
Wongsamun, C.; North Dakota 56

Subject Index - continued

Page

Learning Environment

Burke, S. R.; Missouri 43

Manpower Needs

Sands, C., Swanson, B. E. and Herbst, J. H.; Illinois 21
Summers, J. O.; Utah 110

Occupations

Ambrosia, J.; Illinois 15
Burnett, M. F.; Ohio 62
Claycomb, D. M.; Missouri 45
Migler, J. R.; North Dakota 54
Rheault, K. W.; North Dakota 55
Romig, R. L.; Ohio 83
Ross, S. K.; Ohio 85

Program Evaluation

Cox, D. E.; Arizona 2
Dean, E. D.; Missouri 45
Everett, L. B.; Iowa 28
Hagstrom, D. A.; Colorado 5
Hemp, P. E.; Illinois 19
Mannebach, A. J. and Kline, W. D.; Connecticut 8
Peuse, H. G.; Illinois 20
Schams, D. A.; Minnesota 40
Stitt, T. R., Legacy, J. W., Reneau, F. W. and Benton, R. A.;
Illinois 17

Role Studies

Damann, A. S.; Virginia 116
Kosoko, O.; Ohio 71
Ledesma-Schouwe, R. A.; Texas 107
Poole, A. T.; Ohio 81
Ramsini, W.; Ohio 82

Safety

Carr, B.; Missouri 44
Everett, L. B.; Iowa 28
Massie, C. M.; Maryland 33

Subject Index - continued

Safety - continued Page

Murphy, D. J.; Pennsylvania . . . 102
Reece, D. H.; Oklahoma . . . 94
Riesenberg, L. E.; Minnesota . . . 40

Student Discipline

Camp, W. G.; Indiana . . . 23
Kaczor, C. T.; Florida . . . 10

Supervised Occupational Experience Programs

Cheatham, W. J.; Iowa . . . 27
Cockrum, R.; Oklahoma . . . 91
Jones, J. W., Jr.; Iowa . . . 28
Rhodes, K. B.; Pennsylvania . . . 103

Teacher Attitudes

Hagstrom, D. A.; Colorado . . . 5
Shadle, J. S.; Pennsylvania . . . 104

Teacher Education

Bellard, V. I.; New York . . . 49
Bowen, B. E.; Ohio . . . 59
Crunkilton, J. R., McGough, R. and Poplin, P.; Virginia . . . 116
Harmon, H. L.; Ohio . . . 64
Hemp, P. E. and Swanson, B. E.; Illinois . . . 19
Kirts, C. A. and Claycomb, D. M.; Missouri . . . 46
Kyros, W.; New York . . . 52
Lawrence, L. D. and Mallilo, A. T.; West Virginia . . . 120
Miller, L. E.; Ohio . . . 74
Norman, T. E.; Minnesota . . . 39
Orthel, G. R.; Idaho . . . 14
Parmley, J. and Newcomb, L. H.; Ohio . . . 78
Parsons, A.; Virginia . . . 118
Peters, J. L.; Ohio . . . 79
Pickard, R. D.; Ohio . . . 80
Smith, S. C.; Oklahoma . . . 95
Trede, L. D.; Iowa . . . 32
Weaver, T. C.; Georgia . . . 11

Subject Index - continued

Teaching Techniques — Page

Abuan, L. S.; Minnesota 36
Dunn, D. R.; Virginia 111
Hall, E. B.; Virginia 112
Heilman, J. M.; Ohio. 66
Johnson, R.; Illinois 16
Kandeh, J. B.; Ohio 69
Lawrence, L. D. and Mallilo, A. T.; West Virginia 120
Peters, J. L.; Ohio 79
White, B.; Virginia 115

Vocational Agriculture Programs

Abd-Rahman, Z. B.; Ohio 57
Dorn, D. K.; Virginia 111
Israelsen, C. E.; Utah. 108
Kandeh, J. B.; Ohio 69
Kosel, B. J.; Minnesota 39
Mack, G. L.; North Dakota 54
Mannebach, A. J. and Kline, W. D.; Connecticut. 6
Mannebach, A. J. and Kline, W. D.; Connecticut. 7
Mannebach, A. J. and Kline, W. D.; Connecticut. 8
Maxwell, K. M.; Maryland. 35
Mortensen, J. C.; Idaho 13
Reece, D. H.; Oklahoma. 94
Smith, C. W.; Louisiana 33
Summers, J. O.; Utah. 110

Vocational Agriculture Teachers

Buriak, P.; Pennsylvania. 97
Cheatham, W. J.; Iowa 27
Clark, D. A.; Georgia 10
Cunningham, B. E.; New York 50
Eaves, C. W.; Georgia 11
Goode, J. K.; Missouri. 45
Gott, R. E.; Missouri 46
Heimgartner, D. C.; Idaho 12
Heizenroth, W. R.; Pennsylvania 98
Hillison, J. and Hagee, G.; Virginia. 117
Iverson, M. J. and Davis, P. D.; Alabama 1
Kaczor, C. T.; Florida 10
Kim, S. S.; Minnesota 38
Lighari, A. L.; Missouri 47
Moore, G. E.; Indiana 26
Shadle, J. S.; Pennsylvania 104

Subject Index - continued

Vocational Agriculture Teachers - continued — Page

Thomas, L. G.; Colorado . . . 5
Weaver, T. C.; Georgia . . . 11
Whiteman, L. D.; New York . . . 53
Wilson, L. C.; Virginia . . . 118
Yoakum, H. M.; Oklahoma . . . 95

Vocational Centers

Mannebach, A. J.; Kline, W. D.; Connecticut . . . 6

Vocational Education

Barrick, R. K., Jr.; Ohio . . . 59
Cox, D. E.; Arizona . . . 2
Dean, D. M.; Missouri . . . 45
Dillon, R. D.; Nebraska . . . 48
Knight, J.; Ohio . . . 70
Watkins, J. E.; Ohio . . . 87

Women

Claycomb, D. M.; Missouri . . . 45
Glesne, C. E.; Illinois . . . 18
Knight, J.; Ohio . . . 70
Moore, G. E.; Indiana . . . 26
Ries, A. E.; Ohio . . . 83
Smith, C. J.; Illinois . . . 22
Wilson, L. C.; Virginia . . . 118

TABLE I

LOCATION OF PREVIOUS REGIONAL SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION ON MICROFICHE IN THE ERIC SYSTEM

1968 - 1974*

	Regions			
Year	Central	North Atlantic	Pacific	Southern
1968-1969	ED 036 642	-	ED 036 635	ED 038 543
1969-1970	ED 047 107	ED 047 108	ED 147 110	ED 047 109
1970-1971	ED 057 252	ED 061 415	ED 061 447	ED 061 446
1971-1972	ED 076 800	ED 107 904	ED 078 164	ED 079 472
1972-1973	ED 103 694	ED 107 903	ED 109 376 (1972 1974)	ED 110 745
1973-1974	ED 110 660	ED 110 792		ED 110 746

*Documents with ED numbers may be found in any complete ERIC collection of ERIC microfiche or ordered from EDRS, P. O. Box 190, Arlington, Virginia 22210.

The Summaries of Research and Development Activities in Agricultural Education were compiled nationally for the first time in 1974-75. Data pertaining to location of previously compiled national summaries may be found displayed on Table II.

TABLE II

LOCATION OF PREVIOUS NATIONAL SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION

ON MICROFICHE IN THE ERIC SYSTEM
1974 - 1979*

Year	Microfiche Number
1974-1975	ED 114 635
1975-1976	ED 134 707
1976-1977	ED 151 532
1977-1978	ED 167-781
1978-1979	ED 187-894

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*Documents with ED numbers may be found in any complete ERIC collection of ERIC microfiche or ordered from EDRS, P. O. Box 190, Arlington, Virginia 22210.

PREVIOUS COMPILERS AND EDITORS

Summaries of Research and Development Activities in Agricultural Education United States of America

1974-1975	Dr. J. David McCracken, The Ohio State University
1975-1976	Dr. J. David McCracken, The Ohio State University
1976-1977	Dr. Alfred J. Mannebach, The University of Connecticut
1977-1978	Dr. Alfred J. Mannebach, The University of Connecticut
1978-1979	Dr. Jimmy G. Cheek, The University of Florida
1979-1980	Dr. Jimmy G. Cheek, The University of Florida